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Issues in Applied Linguistics

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ial

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CONTENTS

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RETRACTION

Editorial

This issue of *Issues in Applied Linguistics* marks the end of our tenth year of publication. As a student-run publication, the journal has gone through many changes in editorship over the years, and this issue continues with that tradition by introducing two new editors. In the spirit of the new millenium, we have also changed offices, changed staff, and changed our funding structure.

ial's mission is to publish outstanding research that represents the broad reach of applied linguistics as a field, particularly work that stretches the boundaries of previous research, or that starts down a new path. We are proud to facilitate intellectual dialog in the academic community by publishing and disseminating research to a broad audience-- a process which allows the perspective of authors from many different intellectual traditions to be heard. An essential aspect of the publication process is respecting the rights of intellectual property, which we as a journal are committed to protecting.

Over the next few issues, *ial* pursues that mission by publishing a combination of general issues which explore the breadth of topics in applied linguistics, and special issues which represent a range of approaches to a particular topic. In the future, we hope that our general issues will continue to address a broad range of topics in the field: In particular, we would like to strengthen the representation of articles on language acquisition, language assessment, and language education for which submissions have been waning.

All of the articles here take bold steps forward on the topics they address. This issue contains articles that represent diverse sub-disciplines in Applied Linguistics, and that forge new connections to related fields, pushing the edges between disciplines related to applied linguistics. These authors offer innovative approaches to existing research on language acquisition, discourse analysis, conversation analysis, and language policy, applying new methods and new analytic categories to the study of those areas.

Chiung-chih Huang's article entitled, "Tense-aspect Marking by L2 learners of English and Native English Speakers: Inherent Lexical Aspect and Beyond", explores the question of the acquisition of tense and aspect and sheds new light on this question through fresh analytic categories. While studies of the acquisition of tense and aspect, both in child language and in the study of second language learners, have concentrated their efforts on exploring the effect of inherent lexical aspect on morphological development, Huang examines the role of broader situation types in second language learners' development of tense-aspect morphology. This study uses a well-tested methodology with new analytic categories to show that the repeated versus unitary distinction in situation types has an effect on the learners' use of verb morphology, and suggests further research along these lines, as

well as a reexamination of current theories of morphological development.

In a piece concerning British Sign Language, Graham Turner raises the issue of language shift in a signed language in contact with the spoken language. He suggests that BSL, under the influence of spoken English, has witnessed effects such as increased use of finger spelling as well as changes in lexical and function words that reflect spoken/written language structures. Turner argues that such changes may have repercussions for the uniqueness of BSL and therefore also deaf culture in Britain. Furthermore, Turner makes an argument that culture and cognition are intertwined and suggests that the very nature of deaf cognition as based on a visual system could be affected in a fundamental way if there is a general shift away from the fully vision based sign language.

Finally, Euen Jung's article, "The Organization of Second Language Classroom Repair" explores classroom pedagogy through a focus on classroom interaction. Jung takes ideas from conversation analysis as a foundation and starts to unravel some of the structures used for classroom pedagogy. This article uses the notion of repair, but takes it one step further by understanding repair to be a pedagogical tool used in the ESL classroom by both learners and teachers. Through the use of the repair framework, Jung is able to delineate the actual interactive structures which allow for correction to take place in the ESL classroom.

December 1999   Kathryn Howard
                                                Leah Wingard

Tense-aspect Marking by L2 Learners of English and Native English Speakers: Inherent Lexical Aspect and Unitary vs. Repeated Situation Types

Chiung-chih Huang
Tunghai University

In second language acquisition studies, it has been observed that learners' use of verb morphology is influenced by inherent lexical aspect. The purpose of this study is to go beyond inherent lexical aspect and investigate how the aspectual distinction between 'unitary' and 'repeated' situation types (Smith, 1997) influences learners' and native speakers' use of verb morphology. The data of this study consist of audio-taped interviews of eight subjects: three native English speakers, and five learners whose native language is Mandarin Chinese. The results reveal that in relation to inherent lexical aspect, both learners and native speakers demonstrate similar skewed distributions of verb morphology in their speech. However, in relation to unitary vs. repeated situation types, learners and native speakers demonstrate different patterns in their use of progressive morphology: Native speakers tend to use progressive morphology for describing repeated situations, while learners use it to describe the ongoing, continuous nature of unitary situations. The findings suggest that learners' acquisitional patterns may not be determined exclusively by native input. The prototype account proposed by Shirai & Andersen (1995) provides a feasible explanation for the findings of this study.

INTRODUCTION

In second language acquisition studies, it has been observed that learners' use of verb morphology is influenced by inherent lexical aspect—the temporal features inherent in the lexical meaning of the predicate. That is, there is a strong association between the use of morphological forms and the inherent lexical aspect of the predicate in the early stages of second language acquisition. For example, learners of English demonstrate a strong association between past morphology and predicates with inherent punctuality, and progressive morphology and predicates with inherent durativity. This phenomenon has been referred to as the Primacy of Aspect Hypothesis (Robison, 1990) or the Aspect Hypothesis (Andersen & Shirai, 1996). Since previous research on tense-aspect in SLA has mainly focused on inherent lexical aspect, little is known about the roles of other aspectual features in learners' tense-aspect system. The purpose of this study is to go beyond inherent lexical aspect and investigate how the aspectual distinction between 'unitary' and 'repeated' situation types influences learners' use of verb morphology. Although some researchers have noted that the variable of repeated situation types may play a role in learners' use of tense-aspect morphology (Andersen, 1990; Shirai, 1991; Robison, 1993; Bardovi-Harlig & Reynolds, 1995), no systematic investigation has been carried out. Some researchers, on the other hand, have treated the feature

of repetition as a determinant of inherent lexical aspect (Brinton, 1988), rather than as an independent parameter of aspectual features. This study suggests that it is important to take into account the unitary/repeated distinction in understanding learners' use of tense-aspect morphology. In order to better interpret learners' data, this study analyzes not only learners' speech but also native speakers' speech. As suggested by Andersen & Shirai (1996) in their Distributional Bias Hypothesis, native speakers also use verb morphology in a biased way according to inherent lexical aspect. Therefore, by including native speaker data, this study provides a more complete picture of how learners differ from native speakers in tense-aspect marking and how native input may be able to account for acquisition patterns.

BACKGROUND

Definitions
Tense relates the time of a situation to some other time, usually the speech time (Comrie, 1976). From the reference point of speech time, a situation may be located prior to (past tense), simultaneous with (present tense), or subsequent to (future tense) the moment of speaking. The following two examples show a difference in tense:
(1a) Mary is running.
(1b) Mary was running.

Example (1a) denotes that the event of 'running' occurs at the moment of speaking while (1b) describes the event of 'running' as prior to the time of speech.
Aspect (more specifically, 'grammatical aspect'), on the other hand, is not concerned with relating the time of a situation to any other time point. Comrie states that "aspects are different ways of viewing the internal temporal constituency of a situation" (p.3). Grammatical aspect is explicitly marked by linguistic devices such as auxiliaries or inflections. The progressive aspect in English, and the perfective/imperfective aspect in languages such as Spanish, Russian, and Greek are examples of grammatical aspect. Grammatical aspect is also called 'viewpoint aspect' (Smith, 1983) because it reflects the speaker's view of the situation. The following examples illustrate a contrast in aspect:
(2a) Mary ran.
(2b) Mary was running.

Both (2a) and (2b) are in past tense. However, in (2a), the speaker takes an external view of the event; the action of 'run' is seen as a completed event. In (2b), the speaker takes an internal view of the event; the process or a phase of the action is described.
Inherent lexical aspect, also called 'situation aspect' (Smith, 1983), refers to the temporal features inherent in the semantics of the predicate. Thus *run* is

inherently durative and *jump* is inherently punctual.

Vendler (1967) proposed a four-way classification of inherent lexical aspect; the four categories are state, activity, accomplishment, and achievement. This distinction is based on temporal properties of predicates, as described below (Shirai & Andersen, 1995, p.744):

ACHIEVEMENT: that which takes place instantaneously, and is reducible to a single point in time (e.g., *recognize, die, reach the summit,* etc.).

ACCOMPLISHMENT: that which has some duration, but has a single clear inherent endpoint (e.g., *run a mile, make a chair, build a house,* etc.).

ACTIVITY: that which has duration, but with an arbitrary endpoint, and is homogeneous in its structure. For example, in *John is running*, at every moment the fact of this running has the same quality of running (e.g., *run, sing, play, dance,* etc.).

STATE: that which has no dynamics, and continues without additional effort or energy being applied (e.g., *see, love, hate, want,* etc.).

The four categories can also be distinguished by the semantic features of 'punctual', 'telic' and 'dynamic', as shown in Table 1 (Shirai & Andersen, 1995, p.744). 'Punctual' denotes a single point, having no duration; 'telic' denotes the existence of an inherent endpoint, and 'dynamic' denotes that energy is required for the situation to exist or continue.

Table 1. Semantic Features for Vendler's Classification of Inherent Lexical Aspect

	STATE	ACTIVITY	ACCOMPLISHMENT	ACHIEVEMENT
Punctual	-	-	-	+
Telic	-	-	+	+
Dynamic	-	+	+	+

Repetition is also treated as a determinant of inherent lexical aspect by some researchers. For example, Brinton (1988) defines habitual activities as a fifth aspectual category, 'series', which she adds to the four categories of Vendler (1967). In this study, however, repetition is regarded as an independent variable which is separate from inherent lexical aspect. Inherent lexical aspect and repetition are considered variables of different levels. Inherent lexical aspect belongs to what Smith (1997) calls the 'basic situation types', which involve the internal temporal features of a verb constellation (a verb and its arguments); repetition , on the other hand, belongs to her 'derived situation types', which involve situation type shifts triggered by adverbials or other information from context. Since the feature of repetition is analyzed at a different level, inherent lexical aspect in this study pertains to the temporal features of a predicate in its unitary and uninflected

form. In other words, factors which trigger an interpretation of repetition are not considered at the level of inherent lexical aspect. Such factors include temporal adverbials, plural subjects/objects, tense-aspect markers and other contextual information. These factors, however, are taken into account at the level of derived situation types for the unitary/repeated distinction. Consider the following examples:

(3a) He jumped.
(3b) He was jumping.
(4a) He rode his bicycle.
(4b) He rode his bicycle on Fridays.
(5a) He painted a house.
(5b) He painted houses.
(6a) He fell. (A reply a mother gave his husband about why their son was sitting on the ground crying)
(6b) He fell. (A reply a mother gave a doctor about what happened in the last several months every time her son tried to walk.)

In the four pairs of examples given above, inherent lexical aspect is the same in each pair. After removing the past and progressive markers, both (3a) and (3b) are achievements in their unitary, uninflected form; in the same way, both (4a) and (4b) are activities when not considering the effects of the past markers and the temporal adverbial 'on Fridays'; both (5a) and (5b), on the other hand, are accomplishments after removing the past markers and the plurality of the object 'houses'; both (6a) and (6b) are achievements when excluding the pragmatic information.

However, each pair is different in terms of the unitary/repeated distinction because of the aspectual values contributed by the various contextual factors. Example (3a) denotes a unitary situation, while Example (3b) denotes an iterative situation with the presence of the progressive marker. Example (4a) expresses a unitary activity, but the adverbial 'on Fridays' in (4b) adds a repeated meaning to the situation. In (5a) the predicate is telic and unitary, but it behaves as an atelic, habitual predicate when it is given an indefinite plural object as in (5b). In (6a) the event is interpreted as a unitary punctual event according to the pragmatic information, but the same clause is interpreted as a habitual event in (6b), with the pragmatic information provided.

Repetition is used here as a cover term for 'iterative' and 'habitual'. The difference between iterative and habitual is that iterative refers to repetition on a single occasion while habitual refers to repetition on different occasions (Brinton, 1988). Therefore, 'He was jumping' is iterative while 'He rode his bicycle on Fridays' is habitual.

Previous Studies

Recent studies on the Aspect Hypothesis in L2 acquisition have investigated both uninstructed and instructed learners and have used various elicitation tasks including oral and written narratives, written cloze passages and judgment tasks (see Bardovi-Harlig, 1999, for a review). These studies in general support the claim that a learner's use of tense-aspect morphology is influenced by inherent lexical aspect. English L2 data generally show that past morphology is strongly associated with achievements and accomplishments, and progressive morphology with activities (Bardovi-Harlig, 1998; Bardovi-Harlig & Bergstrom, 1996; Bardovi-Harlig & Reynolds, 1995; Robison, 1990, 1995).

The Distributional Bias Hypothesis has also been supported by studies of native speakers' speech, including speech to other native speakers and to L1 and L2 learners (i.e., Ramsay, 1989; Shirai, 1990, 1991; Stephany, 1981; see Andersen & Shirai, 1996, for a review). That is, native speakers (NS) also demonstrate a strong relationship between verb morphology and inherent lexical aspect. In addition, it has also been observed that learner-directed speech is more consistent with the Distributional Bias Hypothesis than is NS-NS discourse (Stephany, 1981).

Both the Aspect Hypothesis and the Distributional Bias Hypothesis concern inherent lexical aspect. The issue of repetition as a parameter in the acquisition of tense-aspect has not been investigated systematically. Although in Robison (1993), predicates were coded for iterative and habitual, the coding was solely as a check on the relative proportion of habitual, iterative and unitary contexts. Andersen and Shirai (1994) discussed iterative and habitual situations; they pointed out that learners frequently mark unitary telic events with past morphology, but in the same past-anchored episode, verbs which refer to habitual situations may go unmarked. No quantification, however, was conducted in Andersen and Shirai (1994) to support the claim. Bardovi-Harlig and Reynolds (1995), on the other hand, showed that when adverbs of frequency are present in a past context, the rate of learners' use of simple past tense falls and their use of nonpast increases. The authors suggest that learners associate the notion of habitual situations with present tense.

RESEARCH QUESTIONS

This study attempts to analyze how aspectual features influence learners' and native speakers' use of verb morphology. Unlike previous studies, this study examines not only inherent lexical aspect but also the feature of repetition. The purpose is to go beyond inherent lexical aspect in order to better understand the influence of aspectual features at different levels. As mentioned above, both learner and native speaker data will be examined. The research questions of this study are as follows:

(i)   How do learners and native speakers use verb morphology with respect to inherent lexical aspect?

(ii)   How do learners and native speakers use verb morphology with respect to the unitary/repeated distinction?

METHODS

Data

The data of this study consist of audio-taped interviews of eight subjects: three native English speakers, and five learners whose native language is Mandarin Chinese. Each interview lasted about 60-90 minutes. These interviews were conducted in a similar format and covered similar topics. The learners were from 25 to 35 years old, with college or higher education. Three of them are from Taiwan, and the other two are from China. The length of their residence in the United States was from 6 months to 1 year. The years of ESL instruction they had received ranged from 6 to 8 years. The three native speakers were 20 to 40 years old. Two of them have a high school education, and the other has a college education. The three native speakers were born in California, New York and Florida respectively.

Analysis

In the transcribed interview data, all the clauses with finite main verbs which were marked with past morphology or progressive morphology were selected for analysis. Each selected clause was given two levels of coding: inherent lexical aspect and repetition. In coding inherent lexical aspect, grammatical tense-aspect markers were removed from the clause. Contextual factors which trigger a repeated interpretation were also excluded. Each uninflected unitary predicate was then analyzed to determine its inherent lexical aspect by following the operational test developed by Shirai (1991).

In coding the unitary/repeated distinction, each clause was analyzed in terms of its interpretation in the discourse context, including the information contributed by temporal adverbials, plurality of the subject/object, tense-aspect morphology and pragmatic information. Each clause was coded as either Unitary, Iterative or Habitual, depending on whether repetition is involved in the interpretation and whether repetition occurs on one single occasion or on different occasions .

Both token counts and type counts were conducted. In token counts, each occurrence of a predicate was counted separately. In type counts, all occurrences of the same predicate were counted only once. For example, if a speaker produces the utterance 'I got up' twice in the data, the two occurrences were counted as two tokens, but one type. The purpose for the type counts is to check whether some predicates occur repeatedly with disproportionate frequency, and distort the distribution of token counts.

RESULTS

Inherent Lexical Aspect

Figure 1 and Figure 2 display the association between past morphology and inherent lexical aspect. Figure 1 shows the results of token counts; all the tokens of the predicates which were marked with past morphology were classified into Vendler's four categories of inherent lexical aspect. The total number of the tokens analyzed is 396 in learners' speech and 434 in native speakers' speech. Figure 2, on the other hand, shows the type counts: predicates of different types were classified into the four categories. The total number of the types is 157 in learners' speech and 181 in native speakers' speech.

Figure 1. The association between past morphology and inherent lexical aspect (token counts)
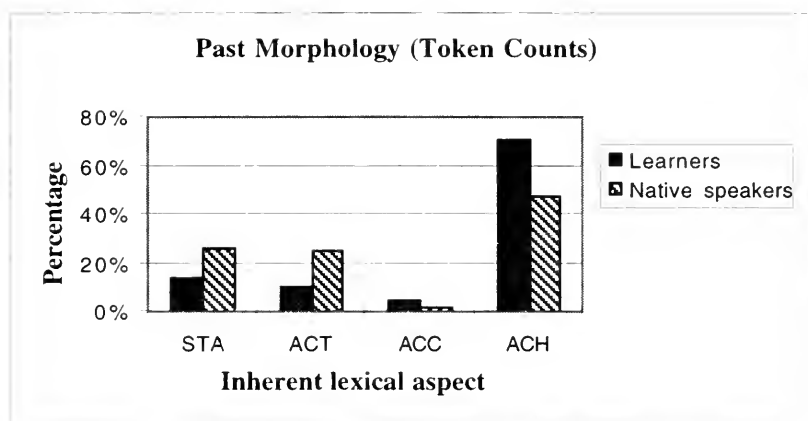
STA stands for stative; ACT stands for activity; ACC stands for accomplishment, and ACH stands for achievement.

The number of tokens: Learners, n=396; Native speakers, n=434

Figure 2. The association between past morphology and inherent lexical aspect (type counts).

Past Morphology (Type Counts)
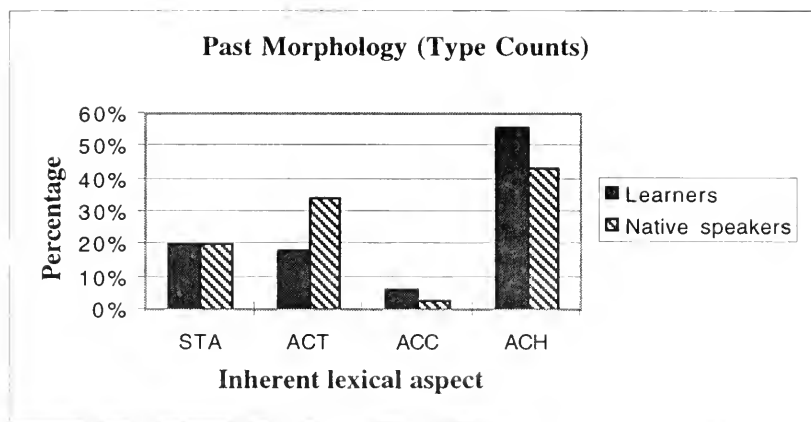
The number of types: Learners, n=157; Native speakers, n=181

As seen in the two Figures, the distributions are skewed toward achievements in both learners' and native speakers' speech. Thus, both learners and native speakers use past morphology most frequently with achievements. In token counts, the percentage of achievements is 71% in learners' speech and 47% in native speakers' speech. In type counts, it is 56% in learners' speech and 43% in native speakers' speech. While both learners and native speakers demonstrate skewed distributions toward achievements, the skewing in native speakers' speech is less dramatic.

Figure 3 and Figure 4 show the association between progressive morphology and inherent lexical aspect. Figure 3 presents the token counts of the progressive-marked predicates across the categories. Figure 4, on the other hand, displays the distributions of the different types of progressive-marked predicates. As seen in the two figures, both learners and native speakers use progressive morphology predominantly with activities. In token counts, the percentage of activities is 73% in learners' speech and 46% in native speakers' speech. In type counts, it is 76% in learners' speech and 49% in native speakers' speech. These results also reveal that the distributions are less skewed in native speakers' speech than in learners' speech.

Figure 3. The association between progressive morphology and inherent lexical aspect (token counts).

The number of tokens: Learners, n=89; Native speakers, n=138

Figure 4. The association between progressive morphology and inherent lexical aspect (type counts).
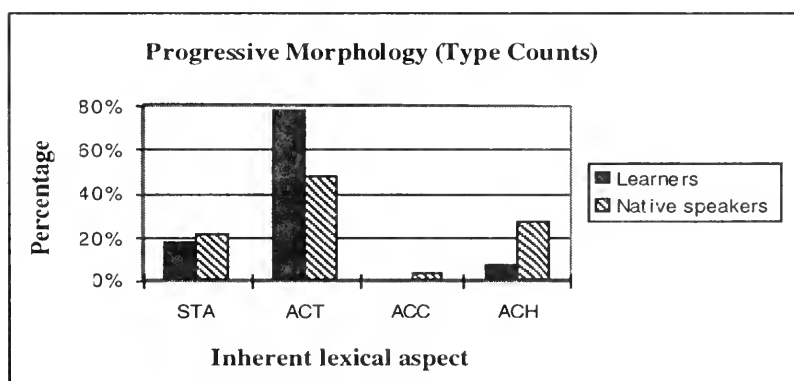
The number of types: Learners, n=69; Native speakers, n=105

As shown in the above four figures, the associations between verb morphology and inherent lexical aspect support both the Primacy of Aspect Hypothesis and the Distributional Bias Hypothesis. That is, learners tend to associate past morphology with achievements and progressive morphology with activities; native speakers

demonstrate similar but weaker associations.

Unitary/Repeated Situation Types

Figure 5 and Figure 6 present the association between past morphology and the unitary/repeated distinction in token and type accounts. In Figure 5, all the tokens of past-marked predicates were classified into the category of 'unitary' or 'repeated' according to whether repetition is involved in the interpretation. Figure 6, on the other hand, shows the distribution of the past-marked predicates in type counts. In the two figures, we see that both learners and native speakers use past morphology mostly for denoting unitary situations. In token counts, the percentage of unitary situations is 85% in learners' speech and 69% in native speakers' speech. In type counts, it is 83% in learners' speech and 57% in native speakers' speech. As we compare learners' and native speakers' speech, we note that the use of past morphology in native speech is less restricted to unitary situations.

Figure 5. The association between past morphology and repetition (token counts).
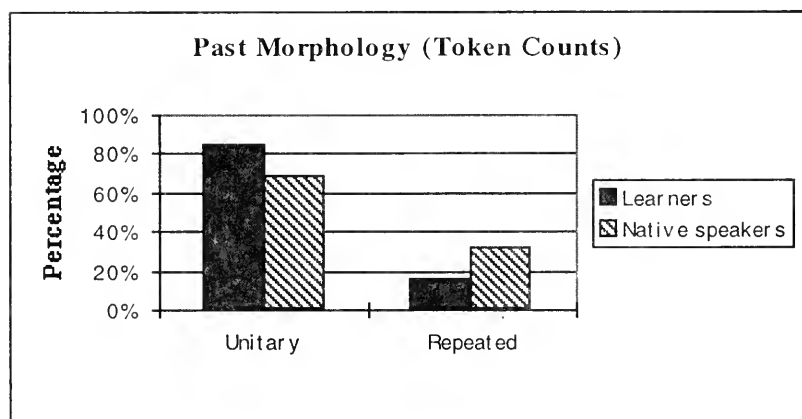
The number of tokens: Learners, n=396; Native speakers, n=434

Figure 6. The association between past morphology and repetition (type counts).

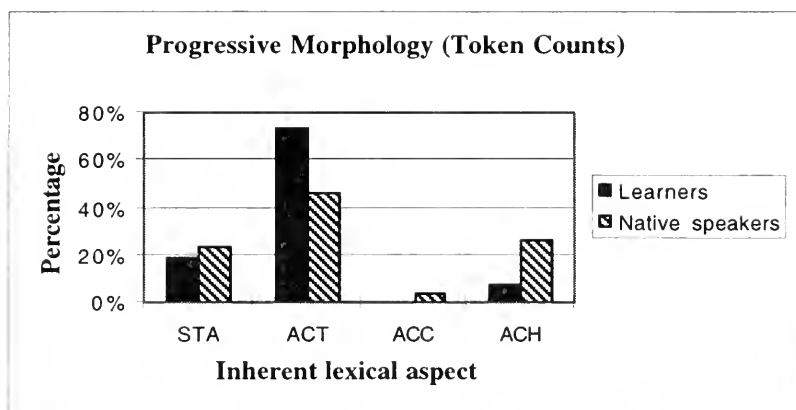Past Morphology (Type Counts)
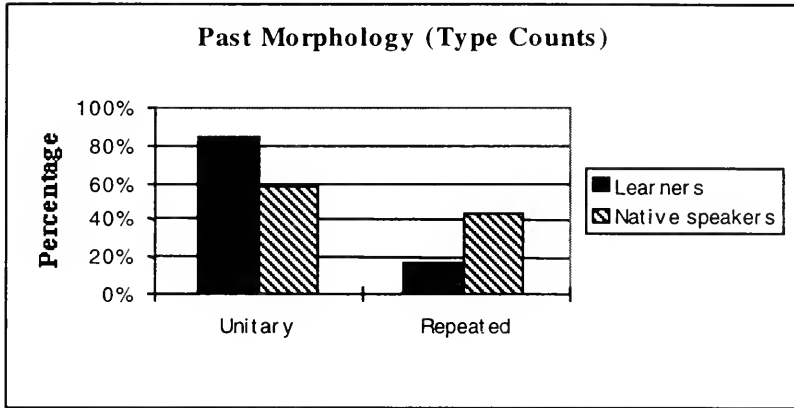
The number of types: Learners, n=157; Native speakers, n=181

The above results display similar skewing patterns in learners' and native speakers' speech. However, in Figure 7 and Figure 8 below, the distributional patterns observed are different in the two groups.

Figure 7. The association between progressive morphology and repetition (token counts).

Progressive Morphology (Token Counts)
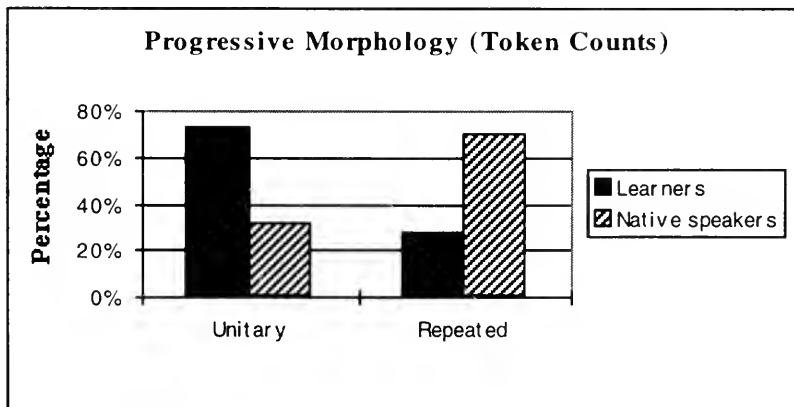
The number of tokens: Learners, n=89; Native speakers, n=138

Figure 8. The association between progressive morphology and repetition (type counts).
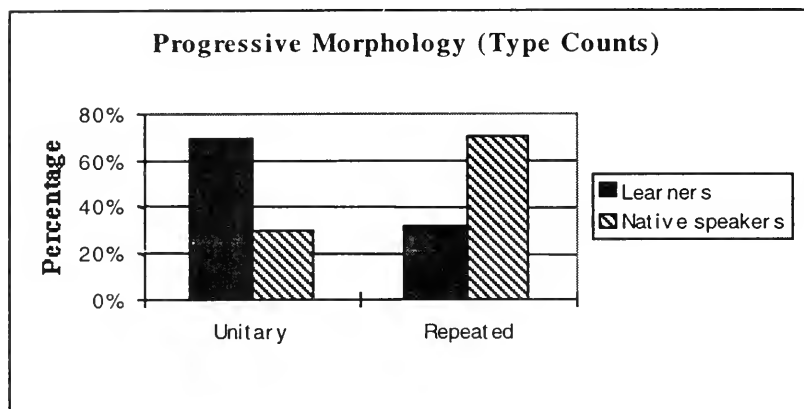
The number of types: Learners, n=69; Native speakers, n=105

Figures 7 and 8 show the association between progressive morphology and the unitary/repeated distinction. In Figure 7, all the tokens of progressive-marked predicates were classified into the category of 'unitary' or 'repeated'. Figure 8, on the other hand, shows the distribution of the progressive-marked predicates in type accounts. In the two figures, we see that learners tend to relate progressive morphology with unitary situations. Native speakers, in contrast, tend to relate progressive morphology with repeated situations. In token counts, the percentage of unitary vs. repeated is 73% vs. 27% in learners' speech, but it is 31% vs. 69% in native speakers' speech. In type counts, it is 70% vs. 30% in learners' speech, but it is 31% vs. 69% in native speakers' speech. In other words, learners and native speakers demonstrate opposite skewing patterns in their use of progressive morphology.

The use of progressive morphology in describing unitary situations focuses on the continuous, ongoing nature of a situation. As seen from the results, learners mainly relate progressive morphology with this meaning. The following examples are from learners' speech:

(1) L#4:
1   afternoon
2   so now he's work -
3   he's *working* at his factory
    (=It's afternoon, so she is now working at the factory.)

The learner was telling the interviewer that his wife was working at the factory at the moment of the interview. The situation in line 3 is unitary, and the verb

working is describing a continuous, ongoing activity. The adverb *now* also contributes to this continuous, ongoing interpretation.

The next example is about an accident which happened when the learner was small. In the accident, the learner hurt her sister's ear with a pair of scissors.

(2) L#1:

1   I was play the scissor
2   and I think
3   she's *laughing* something
4   so that he close - close to me then
5   my sister would hurt his ear a little bit

(I was playing with a pair of scissors. I think she was laughing about something. She came close to me and then my sister hurt her ear a little bit.)

In this example, the learner was describing a unitary event in the past. The progressive-marked verb *laughing* in line 3 also denotes a continuous, ongoing meaning.

In contrast to learners, the results indicate that native speakers use progressive morphology frequently for describing repeated situations. The following examples illustrate how progressive morphology is used by native speakers:

(3) N#3:

1   I get the Culver City paper
2   and ah they're always *talking* about crimes
3   that are everywhere else
4   so I - I guess
5   we're pretty clean up till now

In the above example, the native speaker was commenting that her neighborhood was safe because the newspapers she read were always reporting crimes in other places, but not in her neighborhood. In line 2, the situation is considered to be repeated. That is, when the speaker read newspapers on different occasions, she found that the papers always reported crimes happening elsewhere. The repeated interpretation comes from the temporal adverb 'always', the progressive marker in the verb 'talking', and the plurality of the object 'crimes'. These factors contribute to the repeated interpretation of the situation.

In the next example, the native speaker was asked what he thought his life would be like in ten years.

(4) N#1:

1   ten years
2   let's see
3   hopefully I'll still be *making* records and *touring*

The native speaker, who was a musician, was talking about what he hoped he would be doing in ten years. From the context, it is obvious that 'making records' and 'touring' refer to repeated situations on different occasions. The repeated interpretation comes from the progressive marker in 'making' and 'touring', and the plurality of the object 'records.

As seen from Figure 5 to Figure 8, learners' use of past morphology and progressive morphology demonstrate a skewed distribution toward unitary situations. In the analysis of past morphology, native speakers also demonstrate a skewed, but less dramatic, distribution toward unitary situations. However, in the analysis of progressive morphology, a different pattern was observed. Native speakers tend to use progressive morphology for describing repeated rather than unitary situations.

DISCUSSION AND CONCLUSION

The results of this study reveal that in relation to inherent lexical aspect, both learners and native speakers demonstrate similar skewed distributions of verb morphology in their speech. The skewed distributions indicate that both learners' and native speakers' use of verb morphology is influenced by aspectual features conveyed by inherent lexical aspect. Thus, the results confirm both the Aspect Hypothesis and the Distributional Bias Hypothesis. As pointed out by Andersen and Shirai (1996), if native speakers use verb morphology in such a biased way as to be consistent with the Aspect Hypothesis, it would not be surprising that learners would manifest a similar bias, since they may be simply modeling native speakers. However, we observed that at the level of repetition, learners and native speakers demonstrate different patterns in their use of progressive morphology. This finding thus reveals that learners' acquisitional patterns may not be determined exclusively by native input.

Shirai (1991), Andersen and Shirai (1994) and Shirai and Andersen (1995) propose a prototype account to explain the acquisition of tense-aspect morphology. The prototype account states that learners initially infer from input the most prototypical meaning of each inflection and associate the inflection with the most prototypical members of each semantic aspect class of verbs. The prototype account explains nicely the findings in this study that learners use tense-aspect morphology mainly with unitary situations rather than with repeated situations. As hypothesized by the prototype account, habitual /iterative past is less prototypical than unitary past, and habitual/iterative progressive is less prototypical than unitary (continuous) progressive. Therefore, learners initially will use past and progressive morphemes mainly with unitary situations and later expand their application to repeated situations. However, since the data show that native speakers use progressive more frequently with repeated situations, it appears that when learners infer the prototypical meaning of an inflection, the frequency in native input may not be the most important factor. Since the prototype account does not provide a principled

way for determining the prototype, the question of how learners determine the prototype needs to be further investigated, especially when the input and the learner data do not match. However, since the native speakers' speech in this study is directed to native speakers rather than to learners, one possibility is that in learner-directed speech, native speakers may in fact use progressive morphemes in a way more consistent with the patterns we observed in learners' speech. In other words, when addressing learners, native speakers may restrict the use of progressive morphemes to more prototypical cases.

Another possible explanation for the pattern observed in learners' speech is the influence of learners' native language. In Chinese, the progressive marker *zai* signals the ongoing, continuous nature of an event. The unitary use of English progressive morphology also denotes an ongoing, continuous meaning. The Chinese learners may form a straightforward mapping between the Chinese progressive marker *zai* and the unitary use of the English progressive marker. In other words, the similar usage of the two markers may direct the learners to relate English progressive morphology with unitary situations although there is a stronger association between progressive morphology and repeated situations in native speech.

The phenomenon that learners and native speakers demonstrate different skewing patterns in their use of verb morphology is also observed in Shirai (1995). In his study, Chinese learners of Japanese use the imperfective marker *-tei* more often with activity verbs to express the meaning of action in progress, while native speakers of Japanese use the marker more often with achievement verbs to denote the meaning of resultative state. Shirai also suggests that L1 influence is among the possible explanations for the skewing pattern observed in learners' speech .

The results have shown that although native input may play a crucial role in directing learners' use of verb morphology, other factors may also contribute to the acquisition of verb morphology. The influence of these factors may in some respects override the influence on native input in some respects of the acquisition of verb morphology.

The different associations between progressive morphology and repetition in learners' and native speakers' speech reveal the importance of going beyond inherent lexical aspect in order to better understand learners' use of verb morphology. If we analyze only inherent lexical aspect, we may conclude that learners and native speakers use progressive morphology in a similar way: they both associate progressive morphology with activity verbs. In fact, native speakers may mark activity verbs with progressive morphology to denote repeated events most of the time, while learners' progressive-marked activity verbs are predominantly used to describe unitary events. This non-native use of progressive morphology can not be observed when we examine only inherent lexical aspect, but it is revealed when we further take into account the unitary and repeated aspectual features.

We have seen in this study that not only inherent lexical aspect but also the unitary/repeated distinction should be taken into account. For further research,it would be interesting to further analyze the repeated situations in terms of the

iterative /habitual distinction. For example, we may find that learners are able to mark iterative achievements with progressive morphology but are less capable of marking habitual activities with progressive morphology. In first language acquisition, the use of habitual progressive is very late in development, while the use of progressive to mark iterative achievements is early (Shirai, 1991). This further analysis will show us whether a similar tendency is also observed in second language acquisition. Moreover, the native data used in this study involve NS-NS discourse. Studies of learner-directed speech are needed to understand whether native speakers use verb morphology in a more restricted way when addressing learners. These types of studies can provide more direct evidence as to whether native input contributes to the skewed distributions of verb morphology in learners' speech.

ACKNOWLEDGMENTS

REFERENCES

Andersen, R. W. (1990). Verbal virtuosity and speakers' purposes. In H. Burmeister & P. L. Rounds (Eds.), *Variability in second language acquisition: Proceedings of the tenth meeting of the second language research forum* : *Vol. 2,* pp. 1-24. Amsterdam & Philadelphia: John Benjamins.

Andersen, R. W., & Shirai, Y. (1994). Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition, 16,* 133-156.

Andersen, R.W., & Shirai, Y. (1996). The primacy of aspect in first and second language acquisition: The pidgin-creole connection. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of Second Language Acquisition* (pp. 527-570). San Diego: Academic Press.

Bardovi-Harlig, K. (1999). From morpheme studies to temporal semantics: Tense-aspect research in SLA. *Studies in Second Language Acquisition, 21,* 341-382.

Bardovi-Harlig, K., & Bergstrom, A. (1996). Acquisition of tense and aspect in second language and foreign language learning: learner narratives in ESL and FFL. *The Canadian Modern Language Review, 52,* 2, 309-330.

Bardovi-Harlig, K., & Reynolds, D. (1995). The role of lexical aspect in the acquisition of tense and aspect. *TESOL Quarterly, 29,* 1, 107-131.

Brinton, L. J. (1988). *The development of English aspectual systems: Aspectualizers and post-verbal particles.* Cambridge: Cambridge University Press.

Comrie, B. (1976). *Aspect.* Cambridge: Cambridge University Press.

Ramsay, V. (1990). *Developmental stages in the acquisition of the perfective and the imperfective aspects by classroom L2 learners of Spanish.* Unpublished doctoral

dissertation, University of Oregon, Eugene.

Robison, R. E. (1990). The primacy of aspect: Aspectual marking in English interlanguage. *Studies in Second Language Acquisition, 12*, 315-330.

Robison, R. E. (1993). *Aspectual marking in English interlanguage: A cross-sectional study.* Unpublished doctoral dissertation, University of California, Los Angeles.

Robison, R. E. (1995). The aspect hypothesis revisited: a cross-sectional study of tense and aspect marking in interlanguage. *Applied Linguistics, 16*, 3, 345-370.

Shirai, Y. (1990). *The defective tense hypothesis: Is there a distributional bias in the input?* Unpublished manuscript, University of California, Los Angeles

Shirai, Y. (1991). *Primacy of aspect in language acquisition: Simplified input and prototype.* Unpublished doctoral dissertation, University of California, Los Angeles.

Shirai, Y. (1995). Tense-aspect marking by L2 learners of Japanese. *Proceedings of the 19th Annual Boston University Conference on Language Development, 2*, 575-586.

Shirai, Y., & Andersen, R. W. (1995). The acquisition of tense-aspect morphology: A prototype account. *Language, 71*, 743-762.

Smith, C. S. (1983). A theory of aspectual class. *Language, 59*, 479-501.

Smith, C. S. (1997). *The parameter of aspect,* 2nd ed. Boston, MA: Kluwer.

Stephany, U. (1981). Verbal grammar in Modern Greek early child language. In P. Dale, & D. Ingram (Eds.), *Child language: An international perspective* (pp. 45-57). Baltimore: University Park Press.

Vendler, Z. (1967). *Linguistics in philosophy.* Ithaca, NY: Cornell University Press.

"Ungraceful, Repulsive, Difficult to Comprehend": Sociolinguistic Consideration of Shifts in Signed Languages

Graham H. Turner
Department of Education & Social Science,
University of Central Lancashire, UK

INTRODUCTION

In two earlier papers (Turner, 1995; 1996), I have outlined a case for the possible relocation of the notion of *contact signing*[1] within the broad conceptual field of language shift. Deaf people have tremendous faith in the durability of signed languages (Taylor & Bishop, 1991; Lee, 1992), though the odds against them can seem insurmountable (Lane, 1992). However, many, if not all, signed languages exist in a kind of linguistic 'twilight zone', in the shadow of more powerful and widely-used spoken/written languages. The longer-term impact of the mixed[2] linguistic systems that have been seen (for instance, by Lucas & Valli, 1992 and by Schermer, 1990) to arise in these circumstances has been the focus of relatively little reflection. Though signing as a type of linguistic activity may endure, I have argued that Deaf people may consider it prudent to maintain a degree of concern as to the long-term prospects for their traditional or heritage signed languages. A possible framework for linguistic policy-making in this connection, drawing upon the work of Joshua Fishman (1991), is outlined in Turner (1995).

In the present paper, I wish to put under the microscope the very impulse to raise, even as a *possible* matter of concern, the issue of linguistic shift in a signed language under the influence of a spoken language. The view that changing patterns within signed languages are unwelcome is not new, but its articulation has to date been largely on aesthetic and intuitive grounds. Back in 1904, Dr James L. Smith issued a warning in such terms to Deaf people at the seventh convention of the US National Association of the Deaf: "The enemies of sign language are not confined to those who decry it and call for its abolition entirely. Its most dangerous enemies are in the camp of its friends, in the persons of those who maltreat it and abuse it by misuse. The sign language, properly used, is a language of grace, beauty, power. But through careless or ignorant use it may become ungraceful, repulsive, difficult to comprehend" (cited by Gannon, 1981, p. 363). This may not be the limit of the grounds for concern. The question, then, is this: Languages change – *so what*? The corollary: Can the *result* of change ever legitimately influence the first answer?

In order to explore this question, the structure of this paper will be as follows. Firstly in the background section , I will sketch in broad terms some of the research

that suggests the presence of other-language influences on patterning within some signed languages. I do not consider this very brief review to be either comprehensive or in any way conclusive: the evidence simply does not exist to do more than indicate the possibility that the 'family' of signed languages is currently witnessing in places the effects of influence from neighbouring languages.[3] However, the data that *are* available lead me towards the view that a response to these changes may be appropriate in the short term, rather than too much later, when they may have become embedded. In three subsequent sections, I will address from three related perspectives - humanistic, social and cultural, and cognitive – the issue of what stands to be lost if this particular set of sociolinguistic circumstances do not receive attention. Finally, in the section entitled "Engagement of the Linguist", I face the argument that a traditional, non-prescriptive view of linguistics would still direct the scholar towards a dispassionate neutrality on questions of language change, as matters to be observed, recorded and interpreted, but in which intervention would inevitably be improper. I argue that, in this case, at least a limited form of intervention to raise *awareness* of language change processes and their consequences may in fact be appropriate.

BACKGROUND: SHIFTING PATTERNS

What types of phenomena have been recorded as occurring in situations where signed and spoken/written languages mix? Across a range of levels of structure, structural shifts show some marked parallels to those situations of contact between two spoken languages that have been described (Seliger & Vago, 1991) as constituting language *shift* or language *attrition*. I do not seek here comprehensively to review the literature on spoken/written language influences on signed language structure, but have identified that a number of broad regularities, as follows, seem evident in all cases across a range of key sources (Reilly & McIntire, 1980; Cokely, 1983; Schermer, 1990; Lucas & Valli, 1992).

As far as lexis is concerned, although the principal lexical articulators continue to be the signer's hands, there is reported to be an augmented role for the mouth at this level of structure. Elsewhere, non-manual information may be reduced or absent. Manually-produced distinctions tend to be lost in morphological structure (so that plurality, for instance, ceases to be marked), whilst fingerspelling is used across the lexical spectrum.[4] Lexical meaning and function tend towards reflecting spoken/written language structures. Word order tends to match the word order of the spoken/written language as much, if not more, than it matches the signed language (though it may match neither). Complex sentence constructions may tend to be modelled on spoken/written language patterns, but space continues to be used as an integral element of the grammar (although maintenance of referential loci, i.e., according grammatical functions to established parts of the signing space, may be less consistent).

Certain sociolinguistic factors have also been identified as characteristic of

shift/attrition situations. Julianne Maher (1991) has focused discussion of contact-leading-to-shift situations on so-called *enclave* communities. The essential characteristics of such a community are said to be that it is multilingual (in the broadest sense); that users of the shifting language constitute a minority of the polity (where this minority may be either numerical or socio-political or both); and that the community has been relatively isolated from other users of the language for 100 - 400 years (approximately).

Anne Schmidt's description (Schmidt, 1991) of language shift in Boumaa Fijian and Dyirbal identifies a number of pertinent sociolinguistic factors. The Fijian education system promotes and uses Standard Fijian: the all-English curriculum provides a negative force for Dyirbal, replacing Dyirbal with English and creating and reinforcing the impression that Dyirbal is unimportant. Thus both the very existence of a compulsory education policy and the precise nature of practices within the system are pertinent. Schmidt also identifies the media as a key element. Radio programmes are in Standard Fijian/English, while watching television, presented in an L2, also becomes a frequent pastime. In the Dyirbal case, Schmidt also notes (1991, p. 118) that "All-English literature not only confirms English as a prestigious language, but also glossy magazines and books create desires, images and expectations": these feelings are widely associated with the language in the context of which they are presented.

These analyses by Maher and Schmidt, I suggest (Turner, 1996, 1997), ring clear bells for those who care to consider the sociolinguistic circumstances of most of the world's Deaf communities. Both structural and social sets of information, then, may be seen to give some cause for attention to the matter of the *potential* impact of influences upon heritage signed languages.

Some of the most ethnographically well-attested accounts of language shift also stress that the diminishing language may become associated with a stigmatized identity (Dorian, 1981; Gal, 1979; Kulick, 1992; Schmidt, 1985). Taking seriously the advice given, for instance, by Gal (1992) and Woolard (1992) to maintain a healthy scepticism of claims about single, monolithic ideologies, I would want to highlight the contested nature of any such claim concerning the identity of users of British Sign Language (BSL). Modern history amply demonstrates that Deaf people have widely been considered – as are many disabled people – to be fundamentally 'abnormal' or 'disfunctional' (Davis, 1995) and signed languages have, partly by association, been similarly disparaged. There has been acknowledgement within the sociology of deafness of the stigmatized status of Deaf people as 'outsiders in a hearing world' (Higgins, 1980). This kind of view still appears to be present in the UK and can, at least by implication, be witnessed both in the continuing lack of parliamentary recognition for BSL and the recurring referral of arguments in support of recognition to the Department of Health (for instance by Home Secretary Jack Straw – one of a small handful of politicians at the Government's 'top table' – in his plenary address to the Federation of Deaf People's conference in November 1998).

Nevertheless, there has undoubtedly been a renaissance, of a kind, in the fortunes and status of the Deaf community, just as predicted by Brennan and Hayhurst (1980) in the early days of BSL research. Deaf pride has emerged within the community, and acceptance has developed in the wider society; "deaf people have made the existence of a positive deaf identity possible" (Brien, 1991, p.50). Yet the stigmatization of the past is not swift to disperse and appears at times to be re-emergent. Research with young deaf people suggests that Deaf identity is not highly valued by this group (Gregory et al., 1995). Pointed reference is made by deaf people who do not use BSL to the 'exoticization' of the language and of those who do use it (Corker, 1998a). A real sense of backlash is apparent in, for instance, the correspondence columns of magazines aimed at deaf readers: "Quite frankly, I have had enough of people talking glibly about 'deaf culture' and 'deaf identity' – trendy terms devoid of meaning, catering more to facile expressions of self-deluding fantasy... Personally, I hate being deaf... I cope, but that is without bigoted deaf snobs telling me 'how deafness is enjoyable and something to be proud of'" (Anonymous, 1996). All told, I am not convinced than any single perspective on the stigmatization of BSL users can currently be plainly recognised to be dominant.

Having said this much, it should be noted that it appears *not* to be the case that users of *all* signed languages need necessarily to cast around anxiously for signs of shift. For instance, we learn from accounts of the Swedish experience (Davies, 1991, 1994; Hyltenstam, 1994; Svartholm, 1993) – where the relatively early social and academic recognition of the place of signed languages has led to a high level of tolerance of signing and enviable standards of public service provision to meet the demands of signed language users and their families (Bergman, 1994; Wallin, 1994) – that the prospect of language shift away from the heritage signed language need not be an issue. Perhaps it is not surprising to find that factors contributing to the successful maintenance of Swedish Sign Language within bilingual programmes appear akin to the type of agenda for reversing language shift outlined by policy-making theorists like Joshua Fishman (e.g., Fishman, 1991) and those proposed for the development of sustainable bilingualism by Tove Skutnabb-Kangas (1984a), Hugo Baetens-Beardsmore (1986), Jim Cummins and Merrill Swain (1986) and others.

Where, though, do the preceding background notes lead? We do not yet have a case for paying particular attention to the possible long-term effects of influence from a spoken/written language upon a signed language. It is to this that I now wish to turn.

A key point to acknowledge in exploring the possibility of locating signed languages within the paradigm of language shift (hard to disentangle from "contraction", "loss", "obsolescence", "attrition", "endangerment", "death" and other terms used in closely related and even overlapping accounts within the field – see Dorian, 1989 for discussion[5]) is that sociolinguistic angst tends to arise only when languages are considered to be genuinely *endangered*. This territory is typically inhabited by discussions concerning languages whose user-pool is

shrinking rapidly towards what are felt to be alarmingly small numbers. The now widely-reported claim that half of the world's six thousand languages will be extinct in the next century has reached popular awareness within some circles in the UK (Charter, 1995; Coyne, 1995). By the more extreme estimates (e.g., Krauss, 1992), the number of living languages could be in the hundreds in as little as 100 years' time. Clearly, whatever else is being said about heritage signed languages in this paper, no directly equivalent statement is being made. The result of contact signing is not a community reduced to a mere handful of people who can sign. The suggestion here is, rather, that there appears to be a particular nature to the language changes in question with particular visible consequences to which possible responses are, as yet, under-explored.

The rhetoric of language shift is doubtless controversial (see especially the sharply focused exchange in Hale et al., 1992; Ladefoged, 1992; Dorian, 1993; plus Daniels, 1993). What validity, then, can this vector of analysis claim with regard to signed languages?

HUMANISTIC DIMENSIONS

In the wider field, Ken Hale has been a leading figure in arguing that matters of language shift and endangerment are of legitimate, and even urgent, concern, and that it is right and proper to act upon such concerns by focusing intellectual energy on these issues. "The basic argument," says Hale (1988, p. 3), "is a moral one, having to do with what might reasonably be considered the ultimate purpose of humanity. Assuming that there is such purpose, it seems reasonable to suppose that it implies a responsibility to achieve full and proper use of human intelligence, an endowment unique to the species and given to it in a measure far in excess of any required for pure survival as an animal".

One does not necessarily have to follow the rhetoric to this extent (talk of 'ultimate purposes' being guaranteed to alarm in some quarters) in order to believe, nevertheless, that the pursuit of knowledge of our own human natures has been one of the activities undertaken, to great and illuminating effect, throughout the span of *homo sapiens*. Humankind has used its distinctive biological heritage as best it can in the conceptualisation and creation of a wide range of cultural products. How do we ensure that we continue to stretch ourselves and our understanding of ourselves to the limits? Following Hale's line, the "enabling condition is linguistic and cultural diversity. Only with diversity can it be guaranteed that all avenues of human intellectual progress will be travelled" (Hale, 1988, p. 3-4).[6]

This humanistic argument, then, says that any contraction of our collective linguistic inheritance – of which the eclipse of a heritage signed language would be an instance, if it were shown to be occurring – is cause for concern. Some argue that this is essentially mere sentimentality. Within the confines of this paper, there are no knock-down arguments to settle that particular challenge: for what they are worth, my views tend, along with those of Nancy Dorian, to be that it "seems a

defensible intellectual as well as emotional position to hold that each loss in linguistic diversity is a diminution in an unusually powerful expression of human cultural life, given the nature of language" (Dorian, 1993, p. 578).

Such arguments are familiar when applied to the safeguarding of biodiversity: imperfect as the analogy may be, the underlying current runs along a nearby thread. If one is willing to accept the point, it follows then that even recording and cataloguing language patterns that stand to disappear remains insufficient - just as no archive video footage of the dodo could now fully compensate for the permanent absence of the bird itself. So it is that Hale argues: "While it is good and commendable to record and document fading traditions, and in some cases this is absolutely necessary to avert total loss of cultural wealth, the greater goal must be that of safeguarding diversity in the world of people. For that is the circumstance in which diverse and interesting intellectual traditions can grow" (Hale, 1992, p. 41).

We can therefore see an argument for language maintenance being, at the very least, on the agenda for the most global-scale of reasons, i.e. in the interests of humankind. John Edwards (1984b, p. 281) carefully sums up the broad position with the comment that "it is not easy to deny the claim that complete submersion or homogenisation is a bad thing – bad in the sense of erasing diversity of world perspectives, of eradicating realities which enrich us all." Closely linked to this is the more local humanistic view that communities ought to have the human right to self-determination in matters of language. Fishman explicitly makes this link in writing of "the right and ability of small cultures to live and inform life for their own members as well as to contribute thereby to the enrichment of humankind as a whole" (Fishman, 1991, p. 35).

It is not clear that Deaf communities, afforded this kind of self-determination, would opt in favour of maintaining heritage signed languages. Can it honestly be said that there is solid consensus within Deaf communities concerning matters linguistic? As far as the UK goes, I suspect not.[7] I am aware, for instance, that there is growing pressure in some quarters for a formal, recognised structure of qualification and certification for interpreters who specialise in working between UK contact signing and English. It remains the case that many Deaf people here are ill-informed about the status and capacities of their heritage signed language, BSL. So the first thing required to happen would be for a consensus to be reached that a non-mixed form of signing would be sufficiently desirable to be worth the undoubted effort required to promote it, or at least that the spread of a mixed form should not be allowed to go unquestioned. However, the issue is, I suggest, more complex than has yet been displayed.

SOCIAL AND CULTURAL DIMENSIONS

Agreeing that language choice is a matter of human rights is one thing; the actual making of the choices can be quite another. Much of the rhetoric surrounding

these issues, even when they are discussed in fora in which strenuous efforts are made to maintain a dispassionate position wherever possible, is powerful and seductive. For instance, when Hale (1988, p. 4) writes that minority language communities must be permitted to develop "in accordance with the directions of progress which the communities involved define for themselves," it is not always easy to keep pushing the reasoning to its conclusions. In this case, the 'directions of progress' are no simpler, more readily visible or more linear than are the communities themselves.

On language, as on many other issues, anyone would be hard pressed to proclaim baldly 'what the UK Deaf community thinks'. The community is not monolithic (see Turner, 1994b, 1994c), but rather lives out the implications of internal and external tensions in the fluidity and fluctuation of just such matters as the choice of language made by any participant in community life at any particular moment of engagement or praxis. In this context, acts of identity (in the sense of Le Page &Tabouret-Keller, 1985) are being made at every turn, and the sense of community is constantly constituted and reconstituted in and through linguistic exchange. Shifts in the linguistic patterning play an important symbolic role. Analysis of these shifts is an integral part of the overall analysis of each signed language as a social phenomenon (cf. Branson & Miller, 1992).

An important area for any linguist to consider, therefore, in looking to reach conclusions on the real point of raising concerns about heritage signing is the socio-cultural implication of shifts in language usage. It is striking, for instance, that Deaf writers seem to be identifying the rise of Deaf professionals or a Deaf 'middle class' in recent times (Padden, 1994; Redfern, 1995). Perhaps it becomes more important to keep the distinctive and identity-conferring benefits of heritage signing as this kind of augmented professional role in the wider society expands and the bond with the wider Deaf community stands to be weakened. Alternatively, perhaps the aspiration to be seen as joining such a professional cadre will itself provide pressure to distance oneself linguistically from the 'old-fashioned', 'ill-educated', 'grass-roots' community. With more hearing people to interact with every day, Deaf people may in any case find themselves more often using some form of contact signing (Grosjean, 1982, describes this as tending to occur).[8] It is likely that both pressures will be in evidence. How is any linguist to respond? What is the responsible thing to do?

Changes in language, then, are linked to changes in society and it is imperative that a responsibly applied linguistics take the social context into consideration. Ultimately, as Rob Pensalfini (personal communication, 1995) notes, "there are no languages whose situations demand attention for purely *linguistic* reasons. There are, however, endangered speech communities. What we seem to find, all over the world. is that when a speech community loses its language, it ceases to be a community, and the associated lifestyles and cultural reality also disappear. I'm not claiming that this link is a causal one, but that language may be in a sense a 'thermometer' of cultural vitality, which is otherwise very difficult to measure." If

Pensalfini is right, then one should be aware that comments made about the maintenance of heritage signing also carry implications concerning Deaf cultural choices.

The link between language and culture is inevitably a contentious one, not least because linearity of cause and effect is so hard to come by. Nevertheless it does appear to be the case that shifts in language of the type foreseen in this paper will inevitably have cultural consequences. Fishman (1994, p. 86-87) argues (a) that language is indexical of culture, i.e. that the heritage language is best able to express the objects and abstractions of concern to that culture, (b) that much of the cultural make-up is inherently linguistic (folktales, jokes, songs, riddles, blessings, curses) and a great deal of this cannot be fully transferred into another code in the event of language shift, and (c) that language is symbolic of culture and of members of the community who share that culture.

On this basis, a move away from heritage BSL, for instance, would endanger the vocabulary evolved precisely to express issues of common interest to members of the British Deaf community. It would also threaten to undermine the linguistic inheritance of stories, jokes and BSL artistic signing, and, as Nancy Dorian puts it, "one does not have to be of the Whorfian persuasion to believe that any language ... is the repository of an extraordinary historical accumulation of cultural material, couched in a structure the individuality of which lends a genuinely inimitable flavour to it" (Dorian, 1994a, p. 115).

The symbolic value of heritage BSL is more complex. From outside the community, it is very unlikely that anyone will understand the cause for concern at a shift between BSL and contact signing. What matters and is distinctive to outsiders is that this is all 'signing'. The people who sign now will continue to sign and they will therefore still be seen as Deaf. For Deaf people themselves, the picture is rather more finely calibrated. The difference between heritage BSL and signing that is identified with English structures is highly significant and carries major implications for interpersonal relations and the perception of personal identities (Corker, 1998b). Again, the impact of the possible collapsing together of these two positions must be considered in reaching conclusions about signed language shift.

For all of this careful deliberation and focus upon pitfalls, it must be appreciated that there is ample evidence to suggest that structural compromise in the use of a language may actually *enhance* the chances of its survival, at least insofar as "movement away from conservative norms may be a price to be exacted in return for the emergence of young native speakers" (Dorian, 1994b, p. 490). We have only to look at the present state of the English language and to remember the radical changes that have occurred throughout its history - but especially in the post-Norman French period - to recognise this as an extremely powerful argument. (A 20th century situation with intriguing similarities is described in Huffines, 1991). The issue, as clearly identified by Maguire (1991, p.191), becomes how to maintain "a firm grasp on the reality of what constitutes healthy, inevitable change within a particular set of circumstances."

In the two sections considering the humanistic and the social & cultural dimensions, I have tried to set out some of the arguments adduced by scholars who believe it to be vital that we address situations of language endangerment as a matter of some priority. I have tried to show where these arguments seem to be appropriately made, too, in the context of sociolinguistic concerns about heritage signed languages. Recognition must nevertheless be given to the strong claim that such a position will always be weak and unconvincing for practical purposes: "It is simply not possible to bring about widespread language shift when the appeal is made on the basis of abstractions like culture, heritage and tradition; these are not, of course, trivial or ignoble aspects of life but they are not conscious priorities for most people" (Edwards, 1984b, p. 288). In the next section entitled Cognitive Dimensions, I will argue that the imperative cuts a little more sharply in our field, and that there is a further and atypical set of reasons for suggesting that the 'healthiness' of the changes arising in relation to signed language shifts may be uncertain.

COGNITIVE DIMENSIONS

Understanding our humanity may or may not be a moral imperative, but attempting to get to grips with the insides of our minds has been a major site of human industry. We use our intelligence to understand nature, and the study of humankind itself is one of the most exciting areas of such study. Knowledge of language is seen as a crucial aspect of this quest for understanding, and the fact that signed languages are produced in an entirely different modality, using a different set of articulators and receptors, than those languages upon which the vast majority of scientific theorising has been constructed is certainly one valid reason for hoping that these aspects of structure will persist. It is a fact that has been fundamental to countless research proposals in the sign linguistics field, since it explicitly puts the insights generated into a framework wherein they play an important part in expanding our understanding of what the mind can do: "While it is a tenet of modern scientific linguistics that knowledge of language stems from a specific universal capacity possessed by human beings by virtue of their genetic heritage, there is within the field an exciting and productive tension between the essential unity of human linguistic knowledge, on the one hand, and the rich diversity of human languages, on the other. Without knowledge of the latter, we cannot hope to know the former" (Hale, 1988, p. 5)

So for every language scientist who has 'bought into' the paradigm that has been so dominant within the field since Chomsky explicitly made the quest for knowledge of the mind the ultimate goal of his linguistic research, here is one clear reason to see the benefits of language maintenance in this context. One of the reasons for studying languages is that the less we know about our languages, the less we know about ourselves. They give us an unparalleled window into the mind.

Although I have separated 'cultural' and 'cognitive' dimensions in this paper,

it will be evident that this is extremely artificial. The two are intimately intertwined, with the way we *think* about the world being part of what we use in order to *be* enculturated members of the communities, nations, and the human race. I now want to go on to suggest here that the possible prospect of a shift away from fully vision-based signed languages has repercussions in relation to vision-based cultures and vision-based cognition – and therefore our understanding of what it can mean to be human.

In considering the extent of loss to the cultural repertoire of stories, jokes and the like entailed by shifts in language usage, Anthony Woodbury makes the significant comment that: "At issue really is *any situation where the arbitrary forms and patterns of a language are harnessed to constitute, shape, or model communicative purpose or content,* for in such situations, the loss of the language would render automatically lost some part of the cultural tradition. We can label this situation or phenomenon as FORM-DEPENDENT EXPRESSION," (1993, p. 7: italics and capitals in the original). Here I think we do see a major difference between spoken and signed languages and a specific and crucial reason for believing that the issue of shift away from heritage signing is not trivial. For by virtue of the visual-gestural modality being used to the full, heritage signed languages – such as BSL – are shot through at all levels of structure with a comprehensive visuality that entails form-meaning correspondences *everywhere one looks* due to the 'motivated' nature of the relationships expressed within the stuff of the language (see Brennan, 1990, 1992).

I say this notwithstanding the fact that what continues typically to excite and impress mainstream linguists is the claim they feel able to draw from sign linguistic research that work in languages like BSL and American Sign Language (ASL) "serves to emphasize the *abstractness* of linguistic organisation – its independence from sensorimotor modality" (Jackendoff, 1994, p. 98). It is harder to think of examples of BSL that *do not* contain form-dependent expression than those that *do.* Even an utterance as simple as "they crossed the road" is liable to contain visual information about how many people crossed the road, in which directions they were heading, the manner and method of movement, the point of view of the narrator, and so on.

Thus recognition of the fact that signing is produced in a visual-gestural modality – i.e. its visual nature – is fundamental to an understanding of signed languages as linguistic systems. One might point out that we are not used to talking about 'the pervasive nature of the sonic features of spoken languages', but it wouldn't take people long to notice their significance if they started to go missing. In fact, the very idea is so implausible that it tends to cause mirth. Yet the parallel situation with reference to signed languages is equally simple. Just because they are produced in four dimensions, signed languages are able to use space, shape and movement as an integral part of their structural systems (Poizner, Klima & Bellugi, 1987; Engberg-Pedersen, 1993; Emmorey & Reilly, 1995). And because they can, they do.[9] It would, after all, be hugely counter-intuitive to see, for instance,

a finger pointing towards the ground and be expected to understand that the signer intends to mean 'up'. Signed languages *embody* the world, breathe life into it, in a way that no spoken language ever has or could. Signers make use of these visible features of their languages because it is *natural* to do so. Similarly, it is natural for spoken languages to make use of pitch variation because we have vocal apparatus capable of doing so and are able to create more elegant, efficient and expressive systems for ourselves by taking advantage of the potential therein. We concatenate elements of spoken language production in linear strings through time for the same kinds of reasons. What is extraordinary about signed languages – giving them a uniquely powerful quality of expression – is that the form that the language takes and the world they describe bear such a close relationship to each other in terms of our whole structure for and perception of our engagement as human beings in our surroundings.

Ernst Thoutenhoofd, speaking from a perspective in the sociology of perception, has pointed in particular to that aspect of sign linguistic structure commonly known as *role-shift* as a feature underlining both the significant naturalness of visualisation within signed languages and the cognitive complexity which is required. Role-shift is a term relating to the signer taking on different roles – indicated by eye-gaze and body shift – within a discourse. Once a shift has been made, everything that is signed is produced as if it were from the other party's perspective. The fluent signer may also take on salient aspects of the other's character, as portrayed in the discourse. Thoutenhoofd comments: "We should not judge this ability for role-shift lightly: role-shift also involves a shift *in viewpoint.* The virtual spatial location of the signer changes according to the spatial placement of each character. Only enhanced visual ability can incorporate such a complex and fast perspectival computation" (Thoutenhoofd, 1995). This is not some trick that signers have invented to impress. It is an integral structural feature of the language, and it arises because it makes sense within the visual-gestural linguistic and cognitive framework.

Cognition and culture are here wrapped tightly together – Thoutenhoofd (1995) refers to the "shared cultural visuality" of Deaf people as *ocularcentrism* – and the combination is such as to raise serious questions about the loss incurred were signed languages to undergo a devisualizing shift (potentially a major element, I suggest, of the envisaged spread of contact systems). Heritage signed languages have evolved, in the hands of visual people, to be visual and to inhabit this domain to the full. The use that is made of space and of the many available articulators permits a layering simultaneity of structure which, in fluent signers, results in a visceral visual inevitability that gives these languages a *logic* and an *integrity* unmatched among spoken languages. As the Deaf writers Carol Padden and Tom Humphries have pointed out, the cultures and languages of Deaf people, just like those of hearing people, have evolved over generations to fit the group's biological characteristics; hence the resulting linguistic and cultural products have deep biological (cognitive, neurological) roots. The deep fear of Deaf people is "that

they may be forced to use a language intended for people with different biological characteristics" (Padden and Humphries, 1988, p. 110).

But is it really significant, in such deeply cultural and cognitive terms, that signed languages should have developed in ways that are so thoroughly visual and three-dimensional? The relationships between vision, gestures, signs and space are increasingly being recognised to be pervasive and intricate (see Emmorey and Reilly, 1995). What else do we know that might lead to the conclusion that visuality in language and culture is fundamental to *being* Deaf and to seeing the world through a glass Deafly?

Well, first and foremost, we have Deaf people's own compelling accounts of lives that are lived with the eyes predominant (see papers in Wilcox, 1989; Padden & Humphries, 1988). For outsiders, perhaps it is only in being taken back to the first principles of a deaf childhood by guides as perceptive as Padden and Humphries that some kind of appreciation of the profundity of the difference in experiences can be reached.

We also know, thanks to Deaf writers like Clayton Valli (1990, 1992), that the artistic constructions native to Deaf people are both fundamentally visual in nature and take the expression of the impact of the visible world as a core component. The power and grace of Deaf poetry is embedded within the language's ability to communicate with an immediacy and vitality that brings images to life: the viewer can, quite literally, see what the poet has seen and *share that vision*. Related to this use of language in poetry is the use of metaphorical language in every day interaction. When we stop and consider our language, it is astonishing to recognise just how much of it is metaphorical in some way: these metaphors are so deeply-rooted in our world-view that we simply take them for granted. In a number of examinations of the metaphors by which Deaf people live, Mary Brennan has shown (Brennan, 1990, 1993) how comprehensively visual the Deaf metaphorical base is.

At least four kinds of neurolinguistic studies also give evidence that the river of visuality runs deep.[10] Firstly, much evidence has been collected (Klima & Bellugi, 1979; Kyle & Woll, 1985) demonstrating that Deaf people use visual cues and strategies in the storing and processing of information in the memory. Secondly, we know from studies of slips of the hands that on-line processing of language is handled using visual patterns of constraint and organisation (Klima & Bellugi, 1979). Thirdly, we know from studies of aphasic sign language users that the manifestation of language disruption from such causes takes place along lines drawn out by the effects of vision-based cognitive and linguistic structures (Poizner et al., 1987). Fourthly, work on the development of cognition in deaf children suggests the very early and therefore radical emergence of a distinctively visuo-spatial cognition (Bellugi et al., 1989).

I lay out all of the above, then, by way of suggesting that what stands to be lost if there were to be a shift away from heritage signing is not simply equivalent to the kind of shift that English underwent in contact with French. The profound

part that vision and the envisioning of the world play in heritage signed languages means that a devisualising shift (i.e. one that broke the link between signed form and meaning, between linguistic structures and the world brought to us by our senses and experiences) would not – salient as that may be – replace one set of lexemes and one tradition of grammatical patterning with another, but that a major modality-altering exercise would take place. The implications for Deaf cultural ways, particularly but not exclusively as expressed and transmitted in language, are such as to suggest that such a shift must be seen as different *in kind* and therefore warranting more careful attention before concerns are dismissed as trivial or sentimental.

ENGAGEMENT OF THE LINGUIST

When I have raised these issues in public fora, many people – and especially professional linguists – back off or raise their eyebrows. Why should this be? Not much doubt about that: as linguists, we are trained to remember that *description* and not *prescription* are what the craft is essentially all about. Any discussion of pro-actively interventionist language policy-making in such a context has to be wary of the charge of confounding an academic stance with more subjective advocacy (cf. Edwards, 1980, 1984b), and there are those who say that linguists have absolutely no business to be addressing such matters. There is a fairly systematic ambiguity as to whether claims about language maintenance and shift are intended to be scientific conclusions or ideological stances. In consequence, a diagnosis that 'perhaps something should be done', no matter how principled it be, may, as Woodbury has said, "be taken to be politically presumptuous, or, at least, a renouncement of any claim to political neutrality" (1993, p.5). Were we to reach the conclusion that the issue is essentially one of linguistic human rights – and here one might note that Tove Skutnabb-Kangas has recently written that "deaf minority children need linguistic rights to an even higher extent than oral minority children" (1994, p.143) – then we would be making such a renouncement a *fait accompli.*

I am aware of this, and others have long since expressed similar concerns within the sign language studies field about negotiating the tension between 'scientific detachment' and political engagement (see Brennan, 1986). However, I also believe, as Krauss strikingly puts it, that "it behoves us as scientists and as human beings to work responsibly both for the future of our science and for the future of our languages, not so much for reward according to the fashion of the day, but for the sake of posterity ... If we do not act, we should be cursed by future generations for Neronically fiddling while Rome burned" (1992, p.8; see also the positions developed by Heller et al., 1999). So just what kind of engagement is professionally appropriate for the linguist who sees this issue as a real one? There is no shortage of spurs to take actions, not the least of which is knowing that later generations – to the point of this becoming a cliched reaction[11] – often look to

recover heritage languages sloughed off by the parents and grandparents: "The generation who do not transmit an ethnic language are usually actively in search of a social betterment that they believe they can only achieve by abandoning, among other identifying behaviours, a stigmatising language. The first generation secure as to social position is often also the first generation to yearn after the lost language, which by their time is no longer regarded as particularly stigmatising" (Dorian, 1993, p. 576-7). It would not surprise me to see evidence of this phenomenon in Deaf communities in years to come.

Nevertheless, the arguments against engagement are not petty. A short but powerful statement from Peter Ladefoged (1992) is typical:

Let me now challenge directly the assumption ... that different languages, and even different cultures, always ought to be preserved. It is paternalistic of linguists to assume that they know what is best for the community ... The case for studying endangered languages is very strong on linguistic grounds. It is often enormously strong on humanitarian grounds as well. But it would be self-serving of linguists to pretend that this is always the case. We must be wary of arguments based on political considerations. Of course I am no more in favour of genocide or repression of minorities than I am of people dying of tuberculosis or starving through ignorance. We should always be sensitive to the concerns of the people whose language we are studying. But we should not assume that we know what is best for them. (p. 810)

The point being made needs little amplification. Language users perform a kind of cost-benefit analysis in assessing linguistic relationships with the surrounding society (Edwards, 1984b, 1985, 1994). Consciously or sub-consciously, we all attempt to work through the equations, weighing up the pros and cons in our heads, when making language choices of the most mundane kind. Here we are talking about major choices, and the energy devoted to the analysis is probably therefore the greater. Do Deaf people not think in terms of costs and benefits? After all, it's probably economically wiser, is it not, to be able to understand your interpreter at the job interview, the Deaf presenter on TV, your teacher, your (most often hearing) parents and your hearing colleagues? Thus, if taking a stand for heritage signing is not going to help, and may well hinder, in these relationships, one has a considerable argument against maintenance.

Nancy Dorian has argued (1987) that language maintenance efforts may be valuable even when usage of the minority language still does not greatly increase.[12] Raising the profile of a language can in itself help to mitigate negative attitudes towards users of the language: promotion of the language may help to transmit ethnic histories that might otherwise be threatened: and economic benefits – most obviously, in the form of jobs for language teachers – may emerge.

So it is not the case, surely, that there is too much to lose and nothing to be gained from taking a stand. Look again at the Swedish experience. Brita Bergman made major inroads into sign linguistics when she went through the process of

writing an early book on Signed Swedish (Bergman, 1979). Her conclusions from this exercise led her directly to advocating for the use of the heritage signed language - and we have seen the results for Swedish Deaf people. There may be a question of short term costs and long term benefits, but Swedish Deaf life stands as a very different, and more optimistic, scenario. In a follow-up to Ladefoged's comments, Daniels (1993, p. 587) makes the sharp point that Ladefoged "fails to make an important distinction: some, or many, of the dying languages are dying precisely because of metropolitan influence (...): imperialism, to use a word little heard these days. How many of the communities who choose to abandon their language ... do so only because they are left with no choice?" If a Deaf community shifts to the point of abandoning the heritage signed language, might it not be fair to wonder whether educational, social and service-provision policies have in effect left little choice (and, to take engagement a step further, if so, why?).[13] The challenge, then, lies in trying to figure out what action to take – and how urgently – to ensure that there continues to *be* a choice.

Ladefoged (1992) also argues that recording and documentation are the real legitimate pursuits for the professional linguist. Again, the rejoinder is swift and incisive: "In actuality, linguistic salvage work, which consists solely of 'record(ing) for posterity' certain structural features of a threatened small language is inevitably a political act, just as any other act touching that language would be" (Dorian, 1993, p. 575). It is arguable, too, that the recording and documentation work will proceed best (i.e., with the most satisfactory scientific results) if the native users of the languages in question are engaged directly in the activity. This, of course, is only likely to happen if they receive training that will enable their work to be accepted as properly empirical and objective analysis. Where is such training to come from? It is argued by Krauss (1992) and England (1992), and I would agree, that professional linguists who have an interest in seeing this work carried out effectively should also see it as their responsibility, at least in part, to transmit knowledge of their craft to others in the interests of both good science and of linguistic policy. Given this context, there is much to commend the view that "Priority should be given to the documentation of endangered languages, for the intrinsic scientific value of the knowledge encapsulated in those languages, for the human value of their role in cultural identity, for the scientific interest in the process of attribution of which language death is a case, for what aspects of human cognition are reflected in language structure" (Craig, 1997, p. 270).

Still, perhaps the strongest argument for the value of bringing out into the open concerns about the future of heritage signed languages is that, in performing their cost-benefit analysis, many, many members of Deaf communities are not well informed about their own language, its relationship to other languages, and the sociolinguistic cause-and-effect patterns that they are living in (and living out). Although the situation has changed in the last twenty years, there are still many deaf people who are not entirely convinced that their heritage languages – rich and efficient visual-gestural languages, evolved for and from the stuff of their modality

– actually are 'real and proper languages' at all.

This too, I believe, means that there is a vital responsibility for the linguist to become engaged at least far enough to enable communities to achieve their self-determination on the basis of the fullest possible knowledge of the issues at hand. When discussing bilingualism and biculturalism, people are counselled (e.g., Grosjean, 1992) to think of the ability to make informed choices regarding identification and usage as pivotal. In essence, the suggestion here is no more than a proposal that choices involving *mixed* language codes should be dealt with similarly. In the UK, Deaf people who use English-influenced signing tend, at least in part – and probably largely subconsciously – to do so because it is perceived as 'educated' by other Deaf people, and by many hearing people (if only because the hearing people can understand it better). Most Deaf people here have had it drummed into them throughout their education that the ultimate goal is the development English language skills: these are the keys to life's doors. Perhaps that is the main reason for the engagement of the linguist where one can level the playing field a little by informing Deaf people (and others) of fundamental facts about heritage signed languages and their relationship to other language varieties. Can we as applied linguists not have a role in engaging with communities in order that they *can develop* the ideology to support language maintenance if they so wish?

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ADDRESS FOR CORRESPONDENCE

Graham H Turner
Department of Education & Social Science
University of Central Lancashire
Preston GB-PR1 2HE
UK
E-mail: g.h.turner@uclan.ac.uk

NOTES

[1] Ceil Lucas and Clayton Valli's influential work on contact signing (1989, 1991, 1992) arrives at the conclusion that contact signing is a predictable, consistent system, mutually intelligible between users, resulting from the contact between ASL and English and consisting of features from both languages. ASL-English contact signing is one possible form of the phenomenon which is, for instance, also present mutatis mutandis in the UK and the Netherlands: the two major elements are a natural signed language and a co-occuring spoken language.

[2] I use the term 'mixed' to describe natural language systems that are perceived by users to combine in significant proportion elements of two or more other natural language systems.

[3] It happens that my own interaction over 15 years with Deaf people in the UK leads me to believe that this issue is, in fact, a very real one in this country. I have been asked many times to provide conclusive evidence of this: I cannot. An extensive, longitudinal study would provide the kind of data necessary. Such data does not at present exist for BSL nor for any other signed language of which I am aware. In its absence, several colleagues – particularly those in the USA – have argued that their signed languages are, if anything, becoming *more,* not less, strongly positioned. They cite, for instance, government grants for researchers as evidence. It is not at all impossible that we are both right as regards our respective national circumstances. We have equal need of a great deal more solid data if we plan to reach a conclusion on that issue. But the concern of *this* paper is the response of a language community (including its public intellectuals) to the evidence of potential language shift.

[4] The extent to which finger spelling is properly seen as an embedded or an attached part of signed language is currently an issue of fascinating contention (see Branson et al., 1995). For present purposes, however, the salient point is that finger spelling is more widely used in contact signing discourse.

[5] There are certainly, though, those who find it legitimate to describe a range of language change situations - including those where well-established national languages stand to be lost only in very small geographical pockets – using the more dramatic term language *death,* since "the context and consequences of language shift and obsolesence seem much the same regardless of whether an entire language or a residual or immigrant variety outside the indigenous area is involved" (McMahon, 1994, p. 292).

[6] An extended, compelling and well-grounded case for linguistics and cultural diversity can be found in Fishman, 1982.

[7] I am led to believe – for instance by Carol Padden's discussion (1994) of the USA situation – that the UK does not stand alone in this respect.

[8] Commenting on the symbolic power represented by such switches, Branson and Miller (1992, p. 20) note that, in Australia, most of Deaf people tend to move into signing that follows English word order "even when the skills of the hearing signer do not require such switching."

[9] Visual-spatial expressions of meaning are not the special province of signers, of course (see, for instance, McNeill, 1992). The same cognitive underpinnings are at work when hearing people use gesture in communication, although it is not grammaticized as in signed languages.

[10] An excellent synthesis of fundamental psycholinguistic studies can be found in Grosjean, (1980).

[11] It is also a reaction which has been described as romanticised rather than realistic (e.g., Edwards, 1984b).

REFERENCES

Anonymous (1996). Enough glib talk. *See Hear!* February. 25.

Baetens-Beardsmore, H. (1986). *Bilingualism: Basic principles* (Second Edition). Clevedon, Philadelphia and Adelaide: Multilingual Matters.

Bellugi, U., O'Grady, L., Lillo-Martin, D., O'Grady, M., Van Hoek, K. And Corina, D. (1989). Enhancement of spatial cognition in hearing and deaf children. In V. Volterra & C. Erting (Eds.), *From gesture to language in hearing and deaf children* (pp. 278-298). Berlin and New York: Springer Verlag.

Bergman, B. (1978). *Signed Swedish.* National Swedish Board of Education.

Bergman, B. (1994). The study of sign language in society: Part One. In C. Erting et al. (Eds.), *The Deaf way: Perspectives from the International Conference on Deaf Culture.* (pp. 309-317). Washington DC: Gallaudet University Press.

Branson, J., & Miller, D. (1992). Linguistics, symbolic violence - and the search for word order in sign languages. *Signpost,* 5, 2, 14-28.

Branson, J., Toms, J., Bernal, B., & Miller, D. (1995). The history and role of fingerspelling in Auslan. In H. Bos & T. Schermer (Eds.), *Sign language research 1994: Proceedings of the Fourth European Congress on Sign Language Research in Munich.* Hamburg: Signum.

Brennan, M. (1986). Linguistic perspectives. In B. Tervoort (Ed.), *Signs of life: Proceedings of the Second European Congress on Sign Language Research* (pp. 1-16). Amsterdam: The Dutch Foundation for the Deaf and Hearing Impaired Child; The Institute of General Linguistics of the University of Amsterdam; The Dutch Council of the Deaf.

Brennan, M. (1990). *Word formation in British Sign Language.* Stockholm: University of Stockholm.

Brennan, M. (1992). The visual world of BSL: An introduction. In D. Brien (Ed.), *Dictionary of British Sign Language/English.* London: Faber and Faber.

Brennan, M. (1993). Review article: Semi-semiotics for the semi-conscious. *Signpost,* 6, 1, 47-54.

Brennan, M. and Hayhurst, A. (1980). The Renaissance of British Sign Language. Supplement to *British Deaf News,* October.

Brien, D. (1991). Is there a Deaf culture? In S. Gregory & G. Hartley (Eds.), *Constructing deafness* (pp. 46-52).

Charter, D. (1995). Mind your language. *Times higher educational supplement, 1772* (21 April 1995). 14.

Cokely, D. (1983). When is a pidgin not a pidgin? An alternative analysis of the ASL - English contact situation. *Sign Language Studies, 38,* 1-24.

Corker, M. (1998a). Différance and diaspora: An emerging sociolinguistics of disabled identities. Paper presented at *Sociolinguistics Symposium 12,* London: Institute of Education, Mar. 1998.

Corker, M. (1998b). *Deaf and disabled, or deafness disabled?* Milton Keynes: Open University Press.

Coyne, P. (1995). Dialectrics. *New Statesman & Society*, 8(344), (17 March 1995). 30.

Craig, C. (1997). Language Contact and Language Degeneration. In Coulmas, F. (Ed.) *The handbook of sociolinguistics*. (pp. 257-270). Oxford: Blackwell.

Cummins, J., and Swain, M. (1986). *Bilingualism in education: Aspects of theory, research and practice*. London: Longman.

Daniels, P. T. (1993). Review of Robert H. Robins & Eugenius M. Uhlenbeck (Ed.) "Endangered Languages". *Language in Society*, 22 (4), 585-588.

Davies, S. (1991). Bilingual Education for Deaf Children in Sweden & Denmark: Strategies for Transition & Implementation. *Sign Language Studies*, 71, 169-195.

Davies, S. (1994). Attributes for success. Attitudes and practices that facilitate the transition towards bilingualism in the education of deaf children. In Ahlgren, I., & Hyltenstam, K. (Eds.) *Bilingualism in deaf education*. (pp. 103-121). Hamburg: Signum.

Davis, L. (1995). *Enforcing normalcy: Disability, deafness and the body*. London: Verso.

Dorian, N. (1981). *Language death: The life cycle of a Scottish Gaelic dialect*. Philadelphia: University of Pennsylvania Press.

Dorian, N. (1987). The value of language-maintenance efforts which are unlikely to succeed. *International Journal of the Sociology of Language*, 68, 57-67.

Dorian, N. (Ed.) (1989). *Investigating language obsolescence*. Cambridge: CUP.

Dorian, N. (1993). Choices and values in language shift and its study. *International Journal of the Sociology of Language*, 110, 113-124.

Dorian, N. (1994b). Purism vs. compromise in language revitalization and language revival. *Language in Society*, 23, 479-494.

Edwards, J. (1980). Critics and criticisms of bilingual education. *Modern Language Journal*, 64, 409-415.

Edwards, J. (1984a). Introduction. In Edwards, J., (Ed.) *Linguistic minorities, policies and pluralism*. (pp. 1-16). London, etc: Academic Press.

Edwards, J. (1984b). Language, diversity and identity. In Edwards, J., (Ed.) *Linguistic minorities, policies and pluralism*. (pp. 277-310). London: Academic Press.

Edwards, J. (1985). *Language, society and identity*. Oxford: Basil Blackwell.

Edwards, J. (1994). Ethnolinguistic pluralism and its discontents: a Canadian study, and some general observations. *International Journal of the Sociology of Language*, 110, 5-85.

Emmorey, K. and Reilly, J. (Eds.) (1995). *Language, gesture and space*. NJ and Hove, UK: Lawrence Erlbaum Associates, Hillsdale.

England, N. (1992). Doing Mayan linguistics in Guatemala. *Language*, 68, 29-35.

Engberg-Pedersen, E. (1993). *Space in Danish Sign Language*. Hamburg: Signum.

Fishman, J. (1972). *The sociology of language*. Rowley, MA: Newbury House.

Fishman, J. (1982). Whorfianism of the Third Kind: Ethnolinguistic Diverstiy as a Worldwide Societal Asset. *Language in Society*, 11, 1-4.

Fishman, J. (1989). *Language & ethnicity in minority sociolinguistic perspective*. Clevedon, Philadelphia & Adelaide: Multilingual Matters.

Fishman, J. (1991). *Reversing language shift*. Clevedon, Philadelphia & Adelaide: Multilingual Matters.

Fishman, J. (1994). The truth about language and culture. *International Journal of the Sociology of Language*, 109, 83-96.

Gal, S. (1979). *Language shift*. New York: Academic Press.

Gal, S. (1992) Multiplicity and contention among ideologies: A commentary. *Pragmatics*,

2(3), 445-449.

Gannon, J. (1981). *Deaf Heritage: A narrative history of deaf America*. Silver Spring, MD: National Association of the Deaf.

Gregory, S., Bishop, J. and Sheldon, L. (1995). *Deaf young people and their families*. Cambridge: CUP.

Gromes, B. (Ed.). (1988). *Ethnologue: Guide to the world's languages*. 11th edition. Summer Institute of Linguistics, Inc.

Grosjean, F. (1980). Psycholinguistics of sign language. In H. Lane & F. Grosjean (Eds.), *Recent perspectives on American Sign Language* (pp. 33-59). Hillsdale, NJ: Lawrence Erlbaum Associates.

Grosjean, F. (1982). *Life with two languages: An introduction to bilingualism*. Cambridge, Mass: Harvard University Press.

Grosjean, F. (1992). The bilingual & the bicultural person in the hearing & in the deaf world. *Sign Language Studies*, *77*, 307-320.

Hale, K. (1988). *The human value of local language*. Unpublished manuscript, Massachusetts Institute of Technology.

Hale, K. (1992). Language endangerment and the human value of linguistic diversity. *Languages,* 68 (1), 35-42.

Hale, K., Krauss, M. Watahomigie, L. J., Yamamoto, A. Y., Craig, C., Jeanne, L. M., & England, N. C. (1992). Endangered languages. *Language*, 68 (1), 1-42.

Heller, M., Rickford, J., Laforest, M., & Cyr, D. (1999) Sociolinguistics and public debate. *Journal of Sociolinguistics, 3*, 2, 260-288.

Higgins, P. (1980). *Outsiders in a hearing world*. Sage, Newbury Park.

Huffines, M. (1991). Pennsylvania German: Convergence and change as strategies of discourse. In H. Seliger & R. Vago (Eds.), *First language attrition* (pp. 125-137). Cambridge: Cambridge University Press.

Hyltenstam, K. (1994). Factors influencing the social role and status of minority languages. In I. Alhlgren & K. Hyltenstam (Eds.), *Bilingualism in deaf education* (pp. 297-310). Hamburg: Signum.

Jackendoff, R. (1994). *Patterns in the mind: Language and human nature*. New York, NY: Basic Books.

Klima, E. and Bellugi, U. (1979). *The signs of language*. Cambridge, Mass: Harvard University Press.

Krauss, M. (1992). The World's Languages in Crisis. *Language, 68*, 4-10.

Kulick, D. (1992). *Language shift and cultural reproduction: Socialization, self and syncretism in a Papua New Guinean village*. Cambridge: Cambridge University Press.

Kyle, J., & Woll, B. (1985). *Sign language: The study of deaf people and their language*. Cambridge: Cambridge University Press.

Ladefoged, P. (1992). Another view of endangered languages. *Language, 68* , 4, 809-811.

Lane, H. (1992). *The mask of benevolence*. New York: Alfred A. Knopf.

Lee, R. (Ed.) (1992). *Deaf liberation*. Middlesex: National Union of the Deaf.

Le Page, R., & Tabouret-Keller, A. (1985). *Acts of identity; Creole-based approaches to language and ethnicity*. Cambridge: CUP.

Lucas, C., & Valli, C. (1989). Language contact in the American deaf community. In C. Lucas (Ed.), *The sociolinguistics of the deaf community* (pp. 11-40). San Diego: Academic Press.

Lucas, C., & Valli, C. (1991). ASL or contact signing: Issues of judgement. *Language in Society, 20*, 201-216.

Lucas, C., & Valli, C. (1992). *Language contact in the American deaf community.* San Diego: Academic Press.

Maguire, G. (1991). *Our own language: An Irish initiative.* Clevedon, Philadelphia & Adelaide: Multilingual Matters.

Maher, J. (1991). A crosslinguistic study of language contact and language attrition. In H. Seliger & R. Vago (Eds.), *First language attrition* (pp. 67-84). Cambridge: Cambridge University Press.

McMahon, A. (1994). *Understanding language change.* Cambridge: Cambridge University Press.

Padden, C. (1994). Squibble - The bicultural. *Signpost, 7,* 4, 218-224.

Padden, C., & Humphries, T. (1988). *Deaf in America: Voices from a culture.* Cambridge, Mass: Harvard University Press.

Pensalfini, R. (1995). Personal communication.

Poizner, H., Klima, E., & Bellugi, U. (1987). *What the hands reveal about the brain.* Cambridge, Mass: MIT Press.

Redfern, P. (1995). Deaf professionals - A growing stream. *Deafness,* 11(1), 8-10.

Reilly, J., & McIntire, M. (1980). American Sign Language and Pidgin Sign English: What's the difference? *Sign Language Studies, 27,* 151-192.

Schermer, T. (1990). *In search of a language.* Delft: Eburon.

Schmidt, A. (1985) *Young people's Dyirbal: An example of language death from Australia.* Cambridge: Cambridge University Press.

Schmidt, A. (1991). Language attrition in Boumaa Fijian and Dyirbal. In H. Seliger & Vago (Eds.), *First language attrition* (pp. 113-124). Cambridge: Cambridge University Press.

Seliger, H., & Vigo, R. (1991). The study of first language attrition: an overview. In H. Seliger & R. Vigo (Eds.), *First language attrition* (pp. 3-16). Cambridge: Cambridge University Press.

Skutnabb-Kangas, T. (1984a). *Bilingualism or not: The education of minorities.* Clevedon, Philadelphia and Adelaide: Multilingual Matters.

Skutnabb-Kangas, T. (1984b). Children of guest workers and immigrants: Linguistic and educational issues. In J. Edwards (Ed.), *Linguistic minorities, policies and pluralism* (pp. 17-48). London: Academic Press.

Skutnabb-Kangas, T. (1994). Linguistic human rights: A prerequisite for bilingualism. In I. Ahlgren & K. Hyltenstam (Eds.), *Bilingualism in deaf education* (pp. 139-159). Hamburg: Signum.

Svartholm, K. (1993). Bilingual education for the Deaf in Sweden. *Sign Language Studies. 81.* 291-332.

Taylor, G., & Bishop, J. (Eds.). (1991) *Being deaf.* Pinter Publishers in association with the Open University, Milton Keynes.

Thoutenhoofd, E. (1995). How Descartes drew hearing people only. Paper given at *Body Matters Conference,* UK: University of Hull.

Turner, G. H. (1994a). How is Deaf culture? *Sign Language Studies, 83,* 103-126.

Turner, G. H. (1994b). Response to four commentators. *Sign Language Studies, 83,* 149-154.

Turner, G. H. (1994c). Response to Bahan, Montgomery, Ladd and further discussion. *Sign Language Studies, 85,* 337-366.

Turner, G. H. (1995). Contact signing and language shift. In H. Bos & T. Schermer (Eds.), *Sign Language Research 1994: Proceedings of the Fourth European Congress*

on Sign Language Research in Munich (pp. 211-229). Hamburg: Signum.

Turner, G. H. (1996). Language change at the British Sign Language/English interface. In H. Coleman & L. Cameron (Eds.), *Change and language* (pp. 64-72). Clevedon, Avon: British Association for Applied Linguistics/Multilingual Matters.

Turner, G. H. (1997). The silence of the limbs? Paper presented to the Linguistics Circle Lancaster University, England.

Valli, C. (1990). The nature of a line in ASL poetry. In W. Edmondson & F. Karlsson (Eds.), SLR '87: *Papers from the Fourth International Symposium on Sign Language Research* (pp. 171-182). Hamburg: Signum.

Valli, C. (1992). Linguistic features of ASL Poetry. Paper presented at the *5th International Symposium on Sign language Research*, Spain: Salamanca.

Wallin, L. (1994). The study of sign language in society: Part two. In C. Erting et al. (Eds.), *The Deaf way: Perspectives from the International Conference on Deaf Culture* (pp. 318-330). Washington DC: Gallaudet University Press.

Wilcox, S. (Ed.) (1989). *American deaf culture: An anthology.* Burtonsville MD: Linstok Press.

Woodbury, A. (1993). A defense of the proposition, 'When a language dies, a culture dies'. Paper given at the *First Annual Symposium on Language in Society*, Austin, TX, USA.

Woolard, K. (1992). Language ideology: Issues and approaches. *Pragmatics, 2, 3*, 235-249.

The Organization of Second Language Classroom Repair

Euen Hyuk (Sarah) Jung
Georgetown University

ABSTRACT

This paper presents an analysis of the repair mechanism in second language classroom talk. More specifically, the current paper focuses on how co-participants (i.e., the teacher and the learners) carry out repair operations on the trouble source produced by the learner in the second language instructed talk-in-interaction. The present findings show that participation frameworks (i.e., types of activities) play an important role in constructing repair sequences in the instructional context. When learners engage in role-playing activities with one another, a wide variety of repair sequences are manifested, such as self-initiated and self-completed, self-initiated and other-completed, and other-initiated and other-completed repair sequences. The collaborative nature of repair sequences is also manifested in learner role-playing activities, in which self-initiation of the trouble source by the learner is collaboratively completed with co-participants in the form of word search and try-marking. Other-initiated and other-completed repair in learner role-playing activities is manifested in the form of cluing, which is accompanied by the sequence of teacher's initiation, learner's response, and teacher's evaluation (i.e., IRE sequence). Teacher-fronted activities, on the other hand, in which a teacher asks a question to learner(s), are mainly characterized by other-initiated and other-completed repair structures in the form of IRE sequence and unmodulated "no." Furthermore, a close examination of learners' responses to the teacher's repair (e.g., recast) reveals the key role of activity types operating in L2 instructional discourse.

INTRODUCTION

This paper examines how repair is carried out in an institutional setting, specifically in the second language classroom context. The machinery of repair has long been regarded as one of the most fundamental practices employed in talk-in-interaction. A comprehensive and thorough investigation of repair in everyday conversation was initially carried out by the Conversation Analysts Schegloff, Jefferson, and Sacks (1977) (hereafter Schegloff et al.), in which participants actively engage in monitoring and adjusting to each other to create and interpret messages. Repair addresses problems in hearing, speaking, and understanding the talk (Schegloff et al., 1977). It is triggered by a trouble source, or a repairable in a speaker's utterance and can be identified by the speaker of the trouble source (referred to as "self-initiated") or by the listener (referred to as "other-initiated"). According to Schegloff et al. (1977), a distinction can be made between self-re-

pair, that is, repair completed by the speaker of the trouble source (which can be either self-initiated or other-initiated) and other-repair, that is, repair completed by the listener (which can be self-initiated or other-initiated).

Self-initiated and self-completed repair involves the originator of the trouble source realizing the problem and making repairs, usually in the same turn (Excerpt (1)). In other-initiated and self-completed repair, the hearer locates the trouble source and initiates the repair sequence, and the originator of the trouble source completes it (Excerpt (2)). Self-initiated and other-completed repair takes place when the originator of the trouble source initiates the repair sequence, and the hearer completes it (Excerpt (3)). Other-initiated and other-completed repair occurs when the hearer locates the trouble source, and he or she both initiates and completes the repair sequence (Excerpt (4)). Schegloff et al. (1977) use the following examples to illustrate each of these four repair trajectories (Excerpts (1)-(4)):

(1) self-initiated and self-completed repair
    N: She was givin me a:ll the people that
        —> were go:ne this yea:r I mean this
        —> quarter y'// know
    J: Yeah

(2) other-initiated and self-completed repair
    Ken: Is Al here today?
    Dan: Yeah.
          (2.0)
    Roger: —> He is? hh eh heh
    Dan: —> Well he was.

(3) self-initiated and other-completed repair
    B: —> He had dis uh Mistuh W-whatever k- I can't
        think of his first name, Watts on, the one that wrote // that piece.
    A: —> Dan Watts.

(4) other-initiated and other-completed repair
    B: Where didju play ba:sk//etbaw.
    A: (The) gy:m
    B: In the gy:m?
    A: Yea:h. Like grou(h)p therapy. Yuh know=
    B: [oh:::.
    A: =[half the group that we had la:s term wz there en we jus playing
        arou:nd.
    B:—> Uh- fooling around.
    A: Eh- yeah ...   (Schegloff et al., 1977, pp. 364-365)

A trouble source of any kind, whether of factual knowledge or of language use on the part of the speaker, when pointed out by the hearer, is potentially face-

threatening to the speaker of the trouble source since it reveals his or her incompetence (Goffman, 1974; Goodwin, 1983). To lessen the face-threat to that speaker, the hearer tends to take the blame for miscommunication as if there were problems with hearing or understanding the talk. Opportunities for self-repair are also given prior to those for other-repair in ordinary conversation in order to avoid abrupt interruptions from the hearer for the repair work (Schegloff et al., 1977). Thus, when other-repair occurs, it is usually preceded by a pause in order to provide "extra" opportunities for the speaker of the trouble source to self-repair. If that speaker fails to self-repair, the hearer has to carry out the repair work for him or her. This is usually carried out in a "modulated" way, displaying uncertainty such as "I think," and "You mean X?," rather than in the form of both bold and direct "no and correction" (i.e., in a "unmodulated" way without any redressive actions) (Schegloff et al., 1977, p. 379). Unmodulated other-repair usually takes place in the turn, following a modulated other-repair or understanding checks.

In addition to informal conversation, Schegloff et al. (1977) briefly note that interactions between teachers and students and those between parents and children are primarily characterized by other-repair. They also briefly mentioned that other-repair might prove to be instrumental in socialization and to function as a device for "dealing with those who are still learning or being taught to operate with a system which requires, for its routine operation, that they be adequate self-monitors and self-correctors as a condition of competence" (p. 381).

Several studies have been carried out on repair machinery in the second language classroom context, using Conversation Analysis methodology (Kasper, 1986; van Lier, 1988; Seedhouse, 1997). Repair in the second language classroom generally includes "statements of procedural rules, sanctions of violations of such rules, problems of hearing and understanding the talk, second starts, prompting, cluing and helping, explaining, and correction of errors" (van Lier, 1988, p. 183), which is used in a slightly different way from the original definition of repair in Conversation Analysis as "problems of hearing or understanding."

Kasper (1985) compared repair organization in two types of foreign language teaching: (i) a language-centered phase; and (ii) a content-centered phase of foreign language lessons. The language-centered phase emphasizes grammatical correctness in learners' oral translation task, while the content-centered phase focuses on learners' abilities to understand and express their attitudes toward the literary text content during the oral translation task. It was found that the teaching goals of the two phases play a decisive role in entailing particular repair patterns: the language-centered phase was predominantly characterized by other-repair, while the content-centered phase was mainly characterized by self-repair.

Seedhouse (1997) analyzed numerous extracts from second language classroom repair studies which used Conversation Analysis. His analysis showed that in order to avoid bold (unmodulated) and overt corrections on the learners' errors, teachers generally tend to use a variety of methods, such as using mitigated negative evaluation, repeating erroneous utterances with a rising intonation, and ac-

cepting the incorrect forms and supplying the correct ones. Van Lier (1988), on the other hand, maintained that such repairs made by the teacher in the classroom, including error-replacements and cluing do not necessarily constitute floor-threats and/or face-threats to the learners in the same way that such interruptions might in mundane conversation. He also claimed that such repair work actually functions to facilitate the ongoing construction of the turn.

Furthermore, van Lier claimed that it is important to examine "activities carefully in terms of the kinds of repair they demand by virtue of their construction" (van Lier, 1988, p. 208) and to keep in mind that *"certain types of activity naturally lead to certain types of repair, and that therefore the issue of how to repair is closely related to the context of what is being done"* (van Lier, 1988, p. 211. italics added). However, few studies have specifically examined repair structures within various participation frameworks (types of activities) in the second language classroom. This paper aims to provide further insight into repair mechanism in instructed interactions by investigating the organization of second language classroom repair within different participation frameworks (i.e., learner role-playing activities vs. teacher-fronted activities).

In this paper, I will show how a variety of repair sequences are manifested within different participation frameworks in the second language classroom. First, I will analyze repair structures in learner role-playing activities. Then, I will examine how repair sequences are constructed in teacher-fronted activities. Next, I will further discuss the role of different participation frameworks. focusing on learners' different responses to the teacher's repair (e.g., recast). Lastly, I will conclude the paper with a brief summary of the findings and a suggestion for future research in L2 classroom repair.

METHODOLOGY

The present data came from a video recording of a 60-minute adult beginning ESL class at an American university. There were eleven adult ESL learners in their early 20's, who were from Africa (Algeria), Middle East (Qatar and Saudi Arabia). East Asia (Republic of China, Thailand, and Indonesia), and South America (Argentina, Colombia, Peru, and Chile). The teacher was a female Caucasian native speaker of American English in her late 30's. With respect to the spatial organization of the classroom, the teacher stood in front of the blackboard, and the students sat in a semi-circle facing the teacher. There was a tape-recorder for listening activities on the teacher's desk. The video camera was positioned at the back of the classroom in order to record the lesson. The teacher taught her class as usual. and she did not revise her lesson for the purpose of this particular study.

The focus of the class was on listening/speaking skills with an aim to develop the communication skills of ESL learners. The objectives for the lesson included: (i) learning new vocabulary words such as "popular," "typical," and "favorite"; (ii) making restaurant reservations over the phone; and (iii) using count

and non-count nouns appropriately.

The lesson consisted of activities in the following sequence:
(i) The teacher explained new vocabulary and elicited responses from the learners either by asking questions to the whole class or calling on individuals;
(ii) Learners silently read their textbooks, while the teacher circulated the classroom, answering the learners' questions about the information they were reading;
(iii) Learners listened to the tape activities and engaged in role play activities related to what they have heard on the tape (making a restaurant reservation over the phone);
(iv) The teacher explained count and non-count nouns and elicited responses from the learners by asking questions to the whole class;
(v) The teacher gave the learners a bag with different products, and the learners were asked to identify count and non-count noun products in the bag; and
(vi) The teacher assigned homework for the next class.

The present data will be discussed in terms of participation frameworks (i.e., learner role-playing activities vs. teacher-fronted activities). The transcription conventions are described in the Appendix and are based on the transcription conventions in Sacks et al. (1974). Points relevant to the discussion are indicated by arrows in the excerpts.

REPAIR OF LEARNER'S TROUBLE SOURCE WITHIN DIFFERENT PARTICIPATION FRAMEWORKS

Learner Role-playing Activities

In learner role-playing activities, a wide variety of repair sequences is manifested, including self-initiated and self-completed, self-initiated and other-completed, and other-initiated and other-completed repair sequences.

Self-initiated and self-completed repair in the form of word replacement

Self-initiated and self-completed repair is manifested in learner-learner interactions, which involves word replacement. This repair sequence is demonstrated in Excerpt (5) below[1]:

```
(5) ((Role play: making a restaurant reservation over the phone))
        1 L1:    Alright, what's your request?
—>      2 L2:    E::r, I need e:r a table for uh- a seat for children for two.
```

In Excerpt (5), L2 uses word replacement, in which one item (e.g., a word) is replaced by another in combination with nonlexical utterances such as "uh" (i.e., repair initiator).

Self-initiated and other-completed repair in the form of word search and try-marking as a collaborative enterprise

In the second language classroom, where less competent second language learners and a more competent teacher interact with each other, it is not unusual to find that second language learners appeal to the teacher for help to carry out smooth interactions. Self-initiation by the learner is found to be collaboratively completed by others (i.e., the teacher and the other learners) in the current study. These repair structures show relevance to turn allocation, as Schegloff (1992) discussed, "Because the organization of repair is mapped onto a turn-based organization of talk, variation in the setting or context, or anything that can involve some transformation of the turn-taking system by which the talk is organized . . . may well carry with it differences in the organization of repair . . ." (p. 1337).

Self-initiated and other-completed repair sequences are shown to involve:
(i) a word-search sequence, in which the other participants cooperatively provide the speaker with a word or a phrase for which the speaker is searching, collaboratively completing the speaker's turn (Goodwin & Goodwin, 1986; Lerner, 1995, 1996; Murata, 1994; Sacks, 1992); and
(ii) a try-marking sequence, a self-initiation by the speaker producing a suspected trouble source with a rising intonation, preceded by some hesitations (van Lier, 1988), which also involves the collaborative completion of the ongoing turn by the other participants in the classroom. The excerpt below demonstrates these points:

(6) ((Role play: making a restaurant reservation over the phone))
        ((phone rings))

	1	L1:	Allo::.
	2	LL:	((laughs))
			(1.0)
	3	L1:	Hello. E::r Ale- Alexander's hard, hard rock? Hard rock. May I <u>help</u> you?
—>	4	L2:	Yes, e::r, can I ma:ke? E::r ((L2 shifts her gaze to the teacher)) what's the::?
—>	5	T:	Um, [a reservation.
—>	6	LL:	[A reservation.
	7	L2:	Reservation for the e:r e:r e:r f, Friday the, the ninth for e:r five people?=
—>	8	LL:	=For five=
	9	L1:	=At what time?
	10	LL:	((laughs))
	11	L1:	At what time?
	12	L2:	E::r at six o'clock, at six o'clock. (0.3) at six o'clock.

In Excerpt (6), L1 and L2 engage in the role play activity, in which L1 plays

the role of a restaurant host and L2 plays the role of a guest making a reservation over the phone. Not being able to complete the sentence on her own in line 4, L2 engages in a word search, in which she stretches the sound "ma:ke." She then shifts her gaze to the teacher for help, and this word search is further carried out by asking a wh-question "*What*'s the::?" At this point in line 5 and line 6, both the teacher and the other learners collaboratively help L2 by supplying her with the appropriate item "a reservation" needed to complete the sentence-in-progress. L2 accepts this item "a reservation" and incorporates in the following turn in line 7. Again in the same line, L2 offers a suspected trouble source with a rising intonation in the format of try-marking "five people?," indirectly asking for help. Consequently, in line 8, the other learners promptly provide her with the suitable item in a supporting manner with "for five," cooperatively completing the ongoing turn. Then L1 asks L2 about other information needed to make a reservation, such as the time of the reservation, "at what time?" in line 9, and the talk continues smoothly.

Excerpt (6) also illustrates that more than one speaker completes the repair sequence on the same trouble source when the producer of the trouble source self-initiates, a phenomenon demonstrating that the number of participants plays a role in creating the "context" of interaction (Schegloff, 1991). Either the teacher and the other learners, as in line 5 and line 6, or the other learners among themselves, as in line 8, concomitantly provide the repair work for the learner of the trouble source, displaying "collectivity," "association," or "conjoined participation" of individuals as a single party. That is, members of the association participate in the ongoing discourse as "ensembles" (Learner, 1993).[2] Lerner (1993, p. 221) discussed that "[by] casting themselves as representative of an association[,] speakers can demonstrate their co-partcipation . . . by joining in the production of an ongoing action."

The joint productions provided by co-participants indicate their high involvement and receptive listenership in the co-construction of discourse (Ferrara, 1992). Joint productions as rapport-oriented interruptions are different from power-oriented interruptions in that they do not intend to seize the floor and that they are "viewed as acts of collaboration, cooperation, and/or mutual orientation providing the interruptee with immediate feedback, filling in informational gaps, and elaborating on the interruptee's topic or theme"(Goldberg, 1990, p. 890). Such joint productions are also referred to as "team talk" (Francis, 1996; Kangasharju, 1996; Lerner, 1993), in which participants align as a team in interactions in order to collaborate in continuing the conversation. In addition, a team is interaction-bound in that members of a team are formed spontaneously. The creation of team is not fixed, but flexible. In line 5 and line 6, other learners and the teacher align as a team themselves and jointly complete the L2's ongoing turn, while in line 8, other learners create their own team and demonstrate a team membership by jointly producing the utterance to complete L2's sentence-in-progress.

Other-initiated and other-completed repair in the form of cluing plus IRE sequence

The next data show that repair is initiated by the teacher in the form of clu-ing, in which the hearer can repeat the trouble source item with a rising intonation (i.e., correction-invitation format). Instead of opportunities being left for the speaker of the trouble source to self-repair, the repair sequence is completed by another learner who is participating in the talk. Other-initiation is always carried out by the teacher, and the teacher provides an opportunity for another learner to complete the repair sequence by redirecting a question to the whole class (i.e., "delegated repair," Kasper, 1985). In addition, the repair sequence completed by another learner is accompanied by the teacher's evaluation which completes the three-part instruc-tional sequence (i.e., IRE sequence): (i) teacher's question; (ii) learner's response; and (iii) teacher's evaluation (McHoul, 1978, 1990; Mehan, 1979, 1982, 1985; Sinclair & Coulthard, 1975, 1992).[3]

This IRE sequence accompanying cluing is not so surprising considering the institutional role and its accompanying discursive rights and obligations in this particular instructed context. As Drew and Heritage (1992, p. 49) have suggested, "Institutional interactions may be characterized by role-structured, institutional-ized, and omnirelevant asymmetries between participants in terms of such matters as differential distribution of knowledge, rights to knowledge, access to conversa-tional resources, and to participation in the interaction." Unlike the symmetry of interactions observed in everyday conversation, the classroom talk asymmetry is characterized by the institutional incumbent's (teacher's) means, such as his or her capacity to direct the talk, assign the turn, and evaluate learner's response (see Markee, 2000 for discussion on repair in different power speech exchange sys-tems).

Another important feature that characterizes other-initiated repair by the teacher is a systematic use of the particular intonation contour (i.e., rising intona-tion) in order to signal a problem with the previous learner's utterance. Intonation is utilized as a contextualization cue (Gumperz, 1982) or as an organizational cue (Selting, 1988), and it functions to display the status of the particular utterance in talk-in-interaction. More specifically, it indicates the problematic status of the par-ticular utterance (Goodwin, 1983; Gunter, 1974; Selting, 1988). In this interac-tion, the recipient is expected to react appropriately to such a cue. "[R]ecipients perceive the difference between prosodically unmarked [i.e., normal intonation contour] and marked [i.e., high intonation contour] utterances fairly accurately, and interpret the respective utterances as activities with different sequential impli-cations" (Selting, 1988, p. 295). Excerpt (7) illustrates this point:

(7) ((Role play: making a restaurant reservation over the phone))
  1   L1:   Your telephone number and your address?=
  2   T: =Your add<u>ress</u>?
  3   LL: ((laughs))

			(1.0)
	4	T:	Alright. You need a telephone number and what else do you need? ((shifting her gaze from L1 to the whole class))
—>	5	L8:	Name.
	6	T:	<u>Name</u>, su:re.
	7	L1:	Oh, yes, your name.
	8	T:	Okay.
	9	L2:	Here's my name. Joyce, J, O, Y, C, E. My phone number is e::r nine, nineteen two ((laugh)) ninety three three five.
	10	T:	Nine::
	11	L2:	Nine fifty five.
	12	T:	Nine three three.
	13	L2:	Uh, nine three three five.
	14	T:	Okay.
	15	L1:	See you later.=
	16	T:	=<u>See</u> you <u>later</u>?
	17	LL:	((laughs))
—>	18	L9:	No.
—>	19	L10:	No.
	20	T:	Alright. Uhh, what can Hamza say really if he's gotten the information? What does he say? ((looking at the whole class)) Well, this is formal e:r it's hard rock, a semi-formal situation.
—>	21	L:	That's the table.=
	22	T:	=That's <u>a</u> table. You can repeat the information to confirm that you understood.

In Excerpt (7), L1 is playing the role of a restaurant host taking a reservation over the phone from L2 who is playing the customer. In line 2 the teacher repeats L1's previous utterance "Your address?" with a rising intonation as an indication that this specific word is in need of repair. The other learners are quick to understand the teacher's intention and start to laugh. Instead of providing an opportunity for L1 to self-repair, the teacher shifts her gaze from L1 and directs her question to the whole class in line 4 (the question act). Then another learner promptly provides the appropriate item "Name" in line 5 (the response act). In line 6 the teacher confirms the learner's response by repeating the correct item, "name" with an evaluation marker, "sure" (the evaluation act). As discussed by Cook (1999), such an evaluation marker indexes the teacher as an authority in this instructed interaction. In line 7, L1 then readily accepts and repeats the correct item, "name." A similar phenomenon is observed in line 15, when L1 ends the phone call by saying, "See you later," which is an inappropriate closing for such a context. In line 16 the teacher repeats "See you later?" with a rising intonation as an invitation for correction. In line 17 the other learners immediately pick up on the teacher's prosodic cue, which prompts them to laugh at the error. This time, some learners even say "no" in line 18 and line 19. This is an interesting point to note in that unlike what Sinclair and Coulthard (1975, p. 47) have claimed "the pupil has no

right to contribute to the discourse . . .," the present ESL classroom shows that contributions to the structuring of classroom discourse, including repair sequences are not restricted to the teacher alone. That is, not only the teacher but also learners play the role of evaluator of another learner's remarks (Cook, 1999; Lewis, 1988). In line 20 the teacher again directs her question to the whole class (question act). Then one learner provides "That's the table" as a candidate item in line 21 (response act), which is not a completely correct answer. In line 22 the teacher then provides the correct item "That's a table" (evaluation act).

As seen in the above excerpt, intonation plays a significant role in constructing repair sequences. That is, a rising intonation is often associated with signaling the problem of the ongoing talk: A repetition with a rising intonation functions as an invitation for correction. In contrast to the use of rising intonation, when the repetition is used with a falling intonation, it functions to provide encouragement, display understanding, or acknowledge the correctness of the speaker's previous utterance, building solidarity between the speaker and the hearer (Day et al., 1984; Gaskill, 1980; Goodwin, 1981; Stubbs, 1983). The following segment demonstrates this point:

(8) ((The teacher is asking about the learner's typical breakfast in his country in class))

	1	T:	Um, if I say, uh, Big, in your country, what's a typical, a typical breakfast in your country?
	2	L8:	Um, e:r, e:r, maybe, e:r, coffee.
	3	T:	Coffee=
	4	L8:	=Bread
—>	5	T:	Coffee and bread, ok. Coffee and bread. Coffee and bread are two examples of beverages,[4] beverages. Something to drink. Coffee and bread. Anything else besides coffee and bread?
			(0.5)
	6	L:	Fried egg.

In Excerpt (8), in explaining the new vocabulary words, the teacher designates L8 and asks him about the typical breakfast in his home country. L8 provides the answers "coffee" in line 2 and "bread" in line 4. The teacher repeats his utterance with a falling intonation, indicating her understanding of his previous utterance "coffee" in line 3 and "coffee and bread" in line 5. Then she expands on his utterances to ask another question in line 5 with "Anything else besides coffee and bread?".

TEACHER-FRONTED ACTIVITIES

Unlike a variety of repair sequences manifested in learner role-playing activities, teacher- fronted activities (i.e., a teacher asking a question to learner(s)) is

predominantly characterized by other-initiated and other-completed repair sequence in the form of IRE sequence and unmodulated "no."

Other-initiated and other-completed repair in the form of IRE sequence

In other-initiated and other-completed repair sequence manifested in the form of IRE sequence, the teacher does not supply the speaker of the trouble source with an opportunity to self-repair. Instead she provides opportunities for another learner to repair by eliciting responses from the entire class (i.e., "delegated repair," Kasper, 1985). This instance involves a three-part sequence; (i) the teacher's initiation, (ii) the learner's response, and (iii) the teacher's evaluation sequence (i.e., IRE sequence). The teacher acknowledges the speaker's trouble source and provides an explanation before giving another learner opportunities to complete the repair sequence.

In addition to the teacher's systematic use of the particular intonation contour, as illustrated in the previous section, another important aspect of repair sequences found in this data is her systematic use of gaze. Studies show that gaze plays a central role as one of the turn-allocation techniques in conversation (Criag & Gallagher, 1982; Goodwin 1979, 1981; Sacks et al., 1974). In ordinary talk-in-interaction, when the current speaker casts his or her gaze to a particular hearer (i.e., a potential next speaker), this speaker gaze is interpreted by the hearer as a signal to be the next speaker. In the current instructional setting, when there is a problem with the learner's utterance, the teacher does not provide the learner of the trouble source with an opportunity to self-repair, but shifts her gaze from him or her to the whole class in order to allocate the turn to complete the repair (delegated repair). Then other learners become the next speakers. The following excerpt demonstrates this repair sequence:[5]

> (9) ((The teacher is asking the learners about types of meat))
>
>   1   L5: Fish.
>
> —> 2   T: A:lright. We usually divide fish into a different category, but the::
>   ((shiftingher gaze from L5 to the whole class)) what's another
>   popular <u>meat </u>in the United States?
>
>   3   LL: E::r, e::r
>
>   4   T: ((making a pig sound))
>
>   5   L7: Pork, pork.
>
>   6   L8: Turkey, turkey
>
>   7   T: Ok, <u>pork</u>. Ok, pork is another popular <u>meat</u>.

In Excerpt (9), the teacher asks the learners about types of meat. L5 provides "fish" as the correct item in line 1, which is not correct. Instead of providing self-repair opportunities for L5, the teacher first acknowledges the learner's utterance ("A:lright") and then indicates that "fish" is not a type of meat when she says, "We usually divide fish into a different category." She then immediately shifts her gaze from L5 to the whole class to elicit the correct answer from the other learners and

reiterated the question "but the::, what's another popular meat in the United States?" (question act). Sensing that the learners are having difficulty coming up with the right answer, the teacher gives them a hint by making a pig sound in line 4. Responding to this, L7 and L8 simultaneously provide the candidate items "pork, pork" in line 5 and "turkey, turkey" in line 6, respectively (response act). In line 7 the teacher picks up the L7's candidate response and provides positive feedback on L7's remarks (evaluation act), ignoring L8's response for the moment.

Other-initiated and other-completed repair in the form of unmodulated "no"

An other-initiated and other-completed repair sequence in learner-teacher interactions is also demonstrated in the form of unmodulated "no," as illustrated in Excerpt (10):

(10) ((The teacher is asking the learners about kinds of grain product))

	1	T:	Another grain product?
	2	LL:	Ummmm . . umm . .
	3	L3:	Beans.=
	4	L4:	=Sugar.
	5	T:	E:r=
	6	L6:	=Sugar?=
	7	T	=Sugar, we don't think of sugar as a grain.
	8	L3:	Beans?
	9	LL:	((unint))
–>	10	T:	No, actually I'll bring you some examples tomorrow.
	11	L5:	Spaghetti?
	12	T:	O::ats, barle::y. ((turning her back and starting to write "oats, barley" on the board at the same time))
	13	T:	Err, you've got several, I think, in your Oxford Picture Dictionary, you got some pictures of them. But, I'll bring some, er, in the class tomorrow. Milk products? More milk products?

In Excerpt (10), the teacher asks about other grain product to the whole class. In answer to the teacher's question, L3 provides the candidate item "beans" in line 3. Then L4 immediately provides another candidate item "sugar" in line 4. L6 also provides "sugar" as the candidate item in line 6. In line 7 the teacher picks up the candidate item provided by L4 and L6, ignoring L3's candidate item for the time being. However, neither of these candidate responses are correct. In the same line, the teacher comments on the L4 and L6's answer "sugar," indicating that it is not correct. L3 persists in offering "beans" as the candidate response in line 8, and other learners also try to provide the correct item, to which the teacher boldly says "no" and says she will bring some examples of grain products next class in line 10. However, L5 jumps in with "spaghetti" as a candidate item in line 11, which she ignores, turning her back and starts to write "oats, barley" on the blackboard in-

stead. Observing that eliciting grain products from the learners proves to be too difficult for them at this point, the teacher decides to switch to a different topic, as in line 13 "Milk products. More milk products?"

Learners' Response to Teacher's Recast within Different Participation Frameworks

Another form of repair manifested in the current second language classroom data is a teacher's recast. A recast is a replacement of the learner's error with the correct linguistic form (McHoul, 1990). Learners' responses to the teacher's recast also reveal the key role of activity types operating in the second language instructional discourse. More specifically, the learner's responses to the teacher's recast are found to vary according to the types of activities in which they engage. As Norrick (1991, p. 80, italics added) suggested, classroom interaction "represents but one possible instantiation of a more basic order-*one that depends on how interlocutors perceive their (differential) roles and the goals of their ongoing interaction.*" Participants in the second language classroom assume a variety of participatory roles within different participation frameworks. The roles of the teacher and the learner seem to be changing, depending on the particular participation frameworks in which they engage, which affects every aspect of interactions including repair trajectories and their interactional imports. This phenomenon will be demonstrated in the following section.

Learner Role-playing Activities

In learner role-playing activities, the learner of the trouble source tends to immediately incorporate the teacher's recasts entirely or partially in his or her following turn. This repair sequence is illustrated in the following excerpt:

(11) ((Role play: making a restaurant reservation over the phone))

1	L1:	Alright, what's your request?
2	L2:	E::r, I need e:r a table for uh- a <u>seat</u> for children for two.
—> 3	T:	I <u>need</u> a <u>seat</u> for two children=
4	L2:	=a seat for two children.
5	L1:	Yes, yes, that's guarantee.
—> 6	T:	O:h, we guaran<u>tee</u> it=
—> 7	L1:	=Yes, we guaran<u>tee</u> it.

In Excerpt (11), L1 the restaurant host, and L2 the guest, engage in the role play activity, making a restaurant reservation over the phone. In responding to L1's question, L2 does not provide the correct response. The teacher starts to model the L2's utterances in line 3 "I need a seat for two children," and this is partially incorporated into L2's following turn in line 4 "a seat for two children." The conversation is carried on, and L1 responds to L2's utterances "Yes, yes, that's guarantee" in line 5, which is not completely correct. The teacher provides recast "Ah,

we guarantee it" in line 6. L1 accepts and reiterates this recast "Yes, we guarantee it" in line 7. In this repair structure, the teacher's role is *a modeler*, that is, a person who makes sure that the learners follow the model dialogue in their role plays and provides actual corrections in order for the learners to repeat after her.

This segment of talk also shows that repair patterns found in learner-learner interactions are characterized by "embedded" correction, as opposed to "exposed" correction. "Exposed" correction involves isolating the correction and is accompanied by "accountings." Accountings are discussed by Jefferson (1987, p. 89, italics added) in the following way:

> In the course of the business of correcting we can find such *attendant activities* as, e.g., 'instructing' ('you speak electric motor and a gasoline engine'), 'complaining' ('you always say kil'), 'admitting' ('I didn't get it right'), 'forgiving' ('that's alright, I forgive you'), and in other materials, 'accusing', 'apologizing', 'ridiculing', etc. That is, the business of correcting can be a matter of, not merely putting things to rights, but of *specifically addressing lapses in competence and/or conduct.* Call this class of activities *'accountings.'*

Exposed correction also makes it "interactional business" on its own right, interfering with the ongoing talk at hand. Embedded correction, on the other hand, is not accompanied by accountings or does not involve the business of correcting per se, therefore not disrupting the ongoing course of talk. The teacher's recastings of the L2's incorrect utterances in Excerpt (11) constitute a continuation, rather than a disruption of the current interaction.

Teacher-Fronted Activities

In teacher-fronted activities, the learner does not tend to repeat or incorporate the teacher's recasts into his or her next utterances, but rather tries to collaboratively finish her recasting turn, resulting in a cooperative overlap with the teacher's utterance. Excerpt (12) illustrates this point:

(12) ((L6 describes to the teacher the process of making ice cream "araki" from his own country))
—> 1   L6: And, e:r e:r change uh- change the color ((making circles with his fingers in order to show something is being changed)).
2   T: And it <u>changes</u> [the color], yeah.=
—> 3   L6:   [The color].
4   L6 =The milk no: white.=
5   T: =The milk <u>isn't</u> (0.2) [white].
6   L6:   [White]. The milk change brown.=
—> 7   T   =Alright, the milk be<u>comes</u> (0.2) [brown].
8   L6:   [Brown].
9   T: Hum, this is an ice cream?
10 L6: E:r, yes, it's, it's e::r e::r a [kind] of ice cream.=
—> 11 T: =It's a kind [k<u>ai</u>nd] of ice cream.

In Excerpt (12), in response to the teacher's question about the ice cream that he previously mentioned "araki," L6 is trying to describe to the teacher the process of making it, in which the teacher continuously provides recasts to him. L6 does not incorporate any of these recasts provided by the teacher into his subsequent turns, but rather tries to collaboratively finish her recasting turn, resulting in cooperative overlaps with the teacher's utterances. L6 still smoothly continues with his description of the ice cream without being interrupted. In this repair sequence, the teacher seems to be showing her understanding as *a listener* rather than merely trying to correct the learner's errors by recasting. The learner does not repeat it because he seems to understand the interactional process. He understands that the purpose of the teacher's recast is not for him to repeat, but for the teacher to show him her understanding of his talk; something like "Oh, what you're saying is . . .".[6]

This cooperative overlap does not violate 'one-speaker-at-a-time' turn-taking rules (Sacks et al., 1974), but rather it functions to cooperatively sustain or extend the current speaker's floorholding (Stubbe, 1998; Tannen, 1990). It also functions to signal the listener's active involvement and solidarity with the current speaker's talk, as opposed to minimal responses from the listener (Stenstrom, 1994). Such a cooperative overlap should be distinguished from other types of overlapping in that it is collaborative in nature. That is, it shows the interactive involvement of the listener in the co-construction of discourse, and it is employed by co-participants as a means of support in order to maintain the continuous stream of talk (Stubbe, 1998).

CONCLUSION

The purpose of the current study was to examine how the organization of repair is constructed in the second language classroom talk. This study shows that participation frameworks play a crucial role in constructing repair sequences in second language instructional discourse.

The present findings can be summarized in the following way:[7]

First, in learner role-playing activities, a variety of repair sequences are manifested, including self-initiated and self-completed, self-initiated and other-completed, and other-initiated and other-completed repair sequences.

Second, the collaborative nature of repair sequences is also displayed in learner role-playing activities in which self-initiation by the speaker of the trouble source is collaboratively completed by co-participants in the form of word search and try-marking.

Third, other-initiated and other-completed repair in learner role-playing activities is manifested in the form of cluing, which is accompanied by an IRE sequence.

Fourth, teacher-fronted activities are predominantly characterized by the

other-initiated and other-completed repair sequences in the form of an IRE sequence and unmodulated "no."

Lastly, a close examination of learners' responses to the teacher's repair (e.g., recast) also reveals the significant role of activity types operating in second language classroom talk. In learner role-playing activities, the learner who has produced the trouble source tends to repeat the teacher's recast entirely or partially in his or her next turn. In teacher-fronted activities, on the other hand, the learner of the trouble source does not tend to incorporate the teacher's recasts into his or her subsequent utterances, but rather tries to collaboratively finish her recasting turn, resulting in cooperative overlaps.

This study offers a contribution to the area of the repair organization in the instructional talk by examining the machinery of repair in a beginning ESL classroom. This analysis is based on a video transcription of a sixty-minute ESL class, and to that extent, the analysis presented here is necessarily limited, which points to further research for more thorough investigation of classroom repair. In order to gain a deeper understanding of the repair mechanism in the second language classroom setting, more research is clearly needed, involving a larger corpus of data, a longer time period of observations, different levels and age groups of ESL/EFL learners, and so forth.

ACKNOWLEDGMENTS

NOTES

[1]   There was no other-initiated and self-completed repair in the corpus of the present data.

[2]   Egbert (1997) discussed "collectivity" (i.e., "association") in multiperson interaction in ordinary conversation, focusing on other-initiated repair by multipersons, whereas the present study analyzes other-completed repair by multipersons in the second language instructed setting.

[3]   Sinclair and Coulthard (1975, 1992) refer to this interactional sequence as IRF (Initiation-Response-Feedback). McHoul (1978, 1990) refers to it as QAC (Question-Answer-Comment) sequence.

[4] As previously noted in McHoul's (1990) repair study of first language content classroom, the present data also show errors being made by the teacher that remain unrepaired ("Coffee and bread are two examples of beverages").

[5]   As previously mentioned, repair in the second language instructional talk also includes error correction on factual knowledge as well as linguistic knowledge, in addition to ad-

dressing problems of speaking, hearing or understanding the talk (van Lier, 1988).

6 This particular analysis was partly suggested by one of the anonymous reviewers of this paper.

7 Another interesting phenomenon found in the current second language classroom repair is that, as Schegloff (1992) has suggested about classroom instructions, there is no self-initiated third-position repair found in the present data. However, Lerner (1995) noted instances of third-turn repair in his analysis of instructional activities.

REFERENCES

Cook, H. M. (1999). Language socialization in Japanese elementary schools: Attentive listening and reaction turns. *Journal of Pragmatics, 31,* 1443-1465.

Craig, H., & Gallagher, T. (1982). Gaze and proximity as turn regulators within three-party and two-party child conversation. *Journal of Speech and Hearing Research, 25,* 65-74.

Day, R. R., Chenoweth, N. A., Chun, A. E., & Luppescu, S. (1984). Corrective feedback in non-native discourse. *Language Learning, 34,* 19-46.

Drew, P., & Heritage, J. (1992). Analyzing talk at work: An introduction. In P. Drew & J. Heritage (Eds.), *Talk at work: Interaction in instructional settings* (pp. 3-65). Cambridge: Cambridge University Press.

Egbert, M. M. (1997). Some interactional achievements of other-initiated repair in multiperson conversation. *Journal of Pragmatics, 27,* 611-634.

Ferrara, K. (1992). The interactive achievement of a sentence: Joint productions in therapeutic discourse. *Discourse Processes, 15,* 207-228.

Francis, D. W. (1986). Some structures of negotiation talk. *Language in Society, 15,* 53-79.

Gaskill, W. H. (1980). Correction in native speaker-nonnative speaker conversation. In D. Larsen-Freeman (Ed.), *Discourse analysis in second language research* (pp. 25-37). Rowley, Mass: Newbury House.

Goffman, E. (1974). *Frame analysis.* New York: Harper and Row.

Goldberg, J. A. (1990). Interrupting the discourse on interruptions: An analysis in terms of relationally neutral, power-, and rapport-oriented acts. *Journal of Pragmatics, 14,* 883-903.

Goodwin, M. H. (1979). The interactive construction of a sentence in natural conversation. In G. Psathas (Ed.), *Everyday language: Studies in ethnomethodology.* New York: Irvington Press.

Goodwin, M. H. (1981). *Conversational organization: Interaction between speakers and hearers.* New York: Academic press.

Goodwin, M. H. (1983). Aggravated correction and disagreement in children's conversations. *Journal of Pragmatics, 7,* 657-677.

Goodwin, M. H., & Goodwin, C. (1986). Gesture and coparticipation in the activity of searching for a word. *Semiotica, 62,* 51-75.

Gumperz, J. (1982). *Discourse strategies.* Cambridge: Cambridge University Press.

Gunter, R. (1974). *Sentences in dialogue.* Columbia, SC: Hornbeam Press.

Jefferson. G. (1987). On exposed and embedded correction in conversation. In G. Button & J. R. E. Lee. (Eds.), *Talk and social organization* (pp. 86-100). Clevedon: Multilingual Matters.

Kangasharju, H. (1996). Aligning as a team in multiparty conversation. *Journal of*

Pragmatics, 26, 291-319.

Kasper, G. (1985). Repair in foreign language teaching. *Studies in Second Language Acquisition, 7,* 200-215.

Lerner, G. H. (1993). Collectivities in action: Establishing the relevance of conjoined participation in conversation. *Text, 13,* 213-245.

Lerner, G. H. (1995). Turn design and the organization of participation in instructional activities. *Discourse Processes, 19,* 111-131.

Lerner, G. H. (1996). On the 'semi-permeable' character of grammatical units in conversation: Conditional entry into the turn space of another participant. In E. Ochs, E. A. Shegloff & S.A. Thompson (Eds.), *Interaction and grammar* (pp. 238-276). Cambridge: Cambridge University Press.

Lewis, C, (1988). Japanese first-grade classroom: Implications for U.S. theory and research. *Comparative Education Review, 32,* 159-172.

van Lier, L. (1988). *The classroom and the language learner.* London: Longman.

Markee, N. (2000). *Conversation analysis.* Hillsdale, N.J.: Lawrence Erlbaum Associates.

McHoul, A. W. (1978). The organization of turns at formal talk in the classroom. *Language in Society, 7,* 183-213.

McHoul, A. W. (1990). The organization of repair in classroom talk. *Language in Society, 19,* 349-377.

Mehan, H. (1979). *Learning lessons: The social organization of classroom behavior.* Cambridge, MA: Harvard University Press.

Mehan, H. (1982). The structure of classroom events and their consequences for student performance. In P. Gilmore & A. Glatthorn (Eds.), *Children in and out of school: Ethnography and education* (pp. 59-87). Washington, DC: Center for Applied Linguistics.

Mehan, H. (1985). The structure of classroom discourse. In T. Van Dijk (Ed.), *Handbook of discourse analysis (Vol 3.)* (pp. 120-131). London: Academic.

Norrick, N. R. (1991). On the organization of corrective exchanges in conversation. *Journal of Pragmatics, 16,* 59-83.

Murata, K. (1994). Intrusive or co-operative? A cross-cultural study of interruption. *Journal of Pragmatics, 21,* 385-400.

Sacks, H. (1992). *Lectures on conversation.* Oxford: Blackwell.

Sacks, H., Schegloff, E., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language, 50,* 696-735.

Schegloff, E. (1991). Reflections on talk and social structure. In D. Boden & D. H. Zimmerman (Eds.), *Talk and social structure* (pp. 44-70). Berkeley and Los Angeles, CA: University of California Press.

Schegloff, E. (1992). Repair after next turn: The last structurally provided defense of intersubjectivity in conversation. *American Journal of Sociology, 97,* 1295-1345.

Schegloff, E., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language, 53,* 361-382.

Seedhouse, P. (1997). The case of the missing "no": The relationship between pedagogy and interaction. *Language Learning, 47,* 3, 547-583.

Selting, M. (1988). The role of intonation in the organization of repair and problem handling sequences in conversation. *Journal of Pragmatics, 12,* 293-322.

Sinclair, J., & Coulthard, M. (1975). *Toward an analysis of discourse.* London: Oxford University Press.

Sinclair, J., & Coulthard, M. (1992). Toward an analysis of discourse. In M. Coulthard

(Ed.), *Advances in spoken discourse analysis* (pp. 1-34). London: Routledge.

Stenstrom, A. (1994). *An introduction to spoken interaction.* London: Longman.

Stubbe, M. (1998). Are you listening? Cultural influences on the use of supportive verbal feedback in conversation. *Journal of Pragmatics, 29,* 257-289.

Stubbs, M. (1983). *Discourse analysis.* Oxford: Basil Blackwell.

Tannen, D. (1990). *You just don't understand: Women and men in conversation.* New York: Ballantine Book.

APPENDIX

Transcription Conventions (based on Sacks et al. (1974) with a few additions and simplifications for the convenience of transcribing classroom interaction)

T	Teacher.
L1, L2, etc,	Identified learner.
L	Unidentified learner.
LL	Several or all learners simultaneously.
(0.0)	Pause lengths measured in tenths of a second .
=	No intervals between adjacent utterances, the second utterance latched immediately to the first.
:	Extension of the prior sound or syllable.
?	Rising intonation, not necessarily a question.
[	Simultaneous start or the beginning of an overlap.
]	The point at which two overlapping or simultaneously-started utterances end.
(( ))	Comments about the transcript, including non-verbal information.
__	Indication of stress.
-	Cut-off, self-interruption.
.	Fall in tone, not necessarily the end of a sentence.
[si:m]	Square brackets indicate phonetic transcription.
—>	Pointing out features of interest.
((unint))	unintelligible.

AUTHOR'S INFORMATION

Euen Hyuk (Sarah) Jung is a Doctoral Candidate in Applied Linguistics Program in the Linguistics Department at Georgetown University. Her research interests include second language discourse analysis, listening comprehension, assessment, interlanguage pragmatics, and CALL.

Words and Rules: The Ingredients of Language by Steven Pinker
New York: Basic Books: New York, 1999, 348 pp.

Reviewed by Nancy Jones
University of California, Los Angeles

Words and Rules, the latest popular offering from the prolific MIT lin-
guist Steven Pinker, although characteristically clever and well-written, does not
offer any surprises to those familiar with his other works. Pinker first introduced
the premise underlying *Words and Rules* in his 1994 *The Language Instinct:*

> The way language works, then, is that each person's brain contains a lexicon
> of words and the concepts they stand for (a mental dictionary) and a set of
> rules that combine the words to convey relationships among concepts (a men-
> tal grammar. (p. 85)

Words and Rules expands upon this premise and provides some new twists
on an old theme, as Pinker focuses on regular and irregular verbs as a means to
show that words and rules are the "ingredients" of language.

Over the course of his argument. Pinker also attempts to rule out two com-
peting language theories: Chomsky and Halle's (1991) generative phonology model
and Rumelhart and McClelland's (1986) connectionist model. For those interested
in the ins-and-outs of the past tense or an overview of the connectionist model as
it applies to verbs, this book is worth a read. However, Pinker fails to convince the
reader that connectionist models can immediately be dismissed—nor does he ad-
equately demonstrate how his own "words and rules" model gives us insight to
cognition.

Pinker's theory states that language consists primarily of a grammar for pro-
duction of novel utterances *(rules)* and a lexicon of memorized sound combina-
tions *(words)*. Pinker asserts that the grammatical behavior of regular verbs dem-
onstrates how we use rules to generate words while the behavior of irregular verbs
illustrate the role that memory plays in word generation. Pinker gives a historical
explanation for the fact that certain irregular verbs have similar forms. He states
that the irregular verbs originally were generated by rules and later, through lan-
guage change, became memorized forms.

Comparing this "words and rules" theory to Chomsky and Halle's genera-
tive theory and to the connectionist/neural net theory of Rumelhart and McClelland,
Pinker concludes that neither Chomsky and Halle's model nor Rumelhart and
McClelland's model adequately explain the behavior of regular and irregular verbs.

Chomsky and Halle's model asserts that both the regular and irregular forms

of verbs are generated by rules *in situ*. The production of the regular and irregular verbs is generated by the application of generative phonological rules. The boldest claim of Chomsky and Halle's theory is that the form of the word that is held in a speaker's "mental dictionary" is an *underlying* form which may be radically different from the form that the speaker produces (Pinker, 97). Phonological rules apply to this underlying form to produce the form that is pronounced. These phonological rules apply not only to phonemes (sounds) but also to the features of the phonemes (e.g., place or manner of articulation). For regular verbs, for example, there would be an "add *-ed*" rule. Irregular verbs would be tagged in memory for the vowel change rules (136).

Pinker's theory differs from Chomsky and Halle's account in its insistence that rules are *not* necessary to produce irregular forms. The forms could also simply be memorized, a strategy that may even be computationally simpler. Furthermore, claims Pinker, children, when acquiring language, are exposed to surface forms, and not "underlying" forms. Another objection Pinker raises to the Chomsky/ Halle model is that the similarities among groups of irregular verb stems are not accounted for by phonological rules. Having to determine the underlying forms and the transformation rules from the surface forms places a heavy computational burden on the child. Based on Pinker's reservations, it seems reasonable to conclude that Chomsky and Halle's explanation of children's acquisition of such language skills makes a fundamental aspect their generative phonology model untenable.

Rumelhart and McClelland's "connectionist" model, on the other hand, assumes that there is *no* need for rules to generate language. Patterns of language, they claim, are produced entirely by making associations from input. This pattern associator model consists of a neural network bound at its two extremes by an input layer and an output layer. The input layer would recognize the features of the verb stem and the output layer would produce the actualized sounds. The more often certain input (such as features of the sounds in a verb stem) occurs, the stronger the connections between it and its output will be. When a signal is input, paths of strongest connectivity along the net direct progressively enhanced signals to the output layer.

Thus, before such a neural net can be used to produce the past tenses of a set of words, it must be trained on a set of words and their correct past tenses. The model is then conditioned towards the pattern for the correct form of the verbs since there are strong connections for the features of the correct form of the verbs. Pinker admits that the model performs well in some areas (correctly computing the past tense for 420 words and for three-quarters of 86 novel verbs) and that it *somewhat* behaved as children do when acquiring language in that it produced regular forms for irregulars such as *gived* (p. 108).

However, Pinker then points out what he considers to be three major flaws with the model: (1) the pattern associator can only produce verb forms and cannot be made to recognize verbs *qua* verbs, (2) the model depends too much on phonol-

ogy and therefore cannot distinguish between homonyms, and (3) the model had to be manipulated in order to replicate the behavior of children acquiring a language (pp. 110-111).

At several points throughout *Words and Rules*, Pinker does assent that the failings of both the generative phonological model and the neural net model might be attributed solely to specific details of the models (such as the number of rules or the number of nodes, respectively). More frequently, however, he attempts to show that both these models of language use have problems with their underlying assumptions : "...that memory is compressed to a minimum, in the case of Chomsky and Halle, and that [in the case of Rumelhart and McClelland] generalization works by the laws of association..." (p. 122). To expand upon this point, Pinker examines what the underlying assumptions of each of these two models imply about the frequency effects of regular and irregular verbs.

According to Pinker's own "words and rules" theory, there should be no frequency effects for regular verbs, since regular verbs are generated by the use of rules. Irregular verbs, on the other hand, are not generated by rules, but are memorized as whole lexical items. Thus, frequently used irregular verbs should be accessed from memory faster than infrequently used irregulars. To test this hypothesis as it manifests in the behavior of human subjects, Pinker cites studies by Ullman (1999) and his own study with Prasada and Snyder (1990)—both of which reveal that more frequent irregular past tense verbs are retrieved faster than low-frequency irregulars. Moreover, these studies found no significant difference in retrieval rates between high and low frequency regular verbs. These behaviors are as would be predicted by Pinker's "words and rules" model.

Pinker further claims that while the Chomsky and Halle model adequately explains the behavior of the irregular verbs, the behavior of the regular verbs presents problems for the model's assumption that the role of memory is minimal in language. That the generative phonological model successfully accounts for the behavior of irregular verbs would be expected, claims Pinker, since irregular verbs are tagged for the vowel change rules and tags are strengthened through usage (p. 136).

According to Chomsky and Halle's theory, all verbs would be generated by rules to minimize the use of memory. This seems to explain the above data on irregular verbs. Pinker, though, has problems with how the generative phonological model accounts for the behavior of regular verbs. He summarizes the results of four studies that show that some regular verbs are indeed stored in memory. In all these studies, the subjects took a few hundredths of a second longer to recognize rare regular verbs than they did to recognize common regular verbs.

Pinker sees this as evidence for the advantage of his "words and rules" theory over the generative phonology theory, since it argues for a greater role of memory and shows that in some cases, both rules and features of memory are active for a given verb. This difference, however, seems to be minimal considering that the time delay is so small and that the Chomsky and Halle theory could also account

for the data. Thus, Pinker's criticism of an underlying assumption of the Chomsky and Halle theory—the assumption that memory is compressed—is not fully convincing.

On the other hand, artificial neural networks based on Rumelhart and McClelland's connectionist model, claims Pinker, failed to behave as human beings do when using language. These neural networks had slower response times for all uncommon verbs whether regular or irregular (p. 135). To prove this, Pinker looks at studies investigating human subjects' responses to novel words in three categories: (1) those that look like regular verbs (e.g., *plip*), (2) those that look like English irregulars, (e.g., *spling*), and (3) those that violate rules of English phonology (e.g., *toasp*).

Human subjects successfully conjugated the novel verbs in the first and third categories. For the novel verbs in the second category, these subjects were more likely to form the past tense of the novel word by using an irregular verb pattern. The connectionist pattern associator, however, could not generalize the regular pattern to the verbs in category three. Pinker sees this as a vital failure of the model. He states:

A pattern associator's ineptitude with novel combinations appears to be deeply rooted in its design, not just a failing of a first-generation implementation. Many connectionists have gone back to the drawing board, but none has been able to get a pattern associator memory to generate new regular forms properly. (145)

Pinker is probably too hasty in dismissing the neural net proposal. First, it is premature to dismiss the model because the model does not perform exactly as human beings do on psycholinguistic tests. For although we know that human brain function is at least partly constituted the firing of neurons, we do not know yet exactly what the pattern of neural firing is when we produce language. It may be the case that our brains do produce and process language according to an associator pattern, but that the number of connections needed to produce language is much larger than what is contained in an artificial neural net. On average, such nets contain 0.6×10^9 synapses per mm^3 (Parent, 1996). Yet, young children often have several times this amount. Thus, the inability of the neural net model to process language in the way that human brain does may be due to the fact that the net contains fewer connections than does the brain, and not to the suggestion that concept behind the model is incorrect. Furthermore, such neural nets are trained on minimal sets of information. Perhaps human beings' associations are faster and more complete because we have more information with which to construct our conclusions.

It has been pointed out that another problem with Pinker's eagerness to dismiss the connectionist model is his lack of recognition that and his model and the connectionist model are seeking explanations at different levels of abstraction. In his model, he already assumes symbols and in fact, sees this as a shortcoming of the connectionist model, claiming that "pattern associator memories, unlike symbol crunchers, cannot exploit the basic gadget of computation called a variable"

(p. 144).

One of Pinker's goals in proposing his model is to offer an explanation of how the mind produces and parses language. If Pinker truly wants to develop a model that reflects cognition or brain function, he must at least take into account a model that uses neural-like mechanisms, even if these are rudimentary. It remains to be seen just how well artificial neural nets can model human language. For now, they do at least attempt to explain language activity without assuming symbols. Given the current state of cognitive neuroscience, it might be wiser to continue to consider how the neural net theory might inform more psycholinguistic theories such as Pinker's instead of seeing the two as incompatible.

Throughout the book, Pinker often makes a convincing a case for his "words and rules" theory. However, although this theory may help explain surface linguistic behavior, it does not necessarily give us any insight to the neural underpinnings of language. In its penultimate chapter, *Words and Rules* reviews some recent neurolinguistic studies in an effort to show how their findings may relate to the subject of regular and irregular verbs. Here Pinker presents findings from fMRI and PET studies concluding that regular and irregular verbs are processed in different parts of the brain. While this is an interesting finding, it alone does not give us any information about how the brain processes language. Additionally, it is not clear exactly how this relates to or supports Pinker's "words and rules" theory.

Perhaps the greatest strength of *Words and Rules*, however, is the thoroughness of the work. In it, Pinker offers abundant examples and data from psycholinguistic studies, philosophy, historical linguistics, and popular culture. A reader interested in a thorough examination of regular and irregular past tense— as well as in how plurals are used in compounds and in how people deal with novel verbs—will appreciate the completeness of its approach.

Moreover, as a popular author, Pinker writes well and excels at making interesting observations. Yet, the observations in *Words and Rules* do not reveal as much about the cognitive aspects of language as Pinker might lead his readers to believe. For while the "words and rules" model that forms the basis of the book may be a useful model for explaining language behavior, it is not clear that it adequately accounts for the underlying neural mechanisms underlying language and cognition.

REFERENCES

Chomsky, N. & Halle, M. (1968/1991). *The sound pattern of English.* Cambridge, MA: MIT Press.

Parent, A. (1996). *Carpenter's human anatomy.* Ninth Ed. Providence, RI: Williams and Wilkins.

Pinker, S. (1994). *The language instinct.* New York: Harper Perennial.

Prasada, S., Pinker, S., & Snyder, W. (1990, November). *Some evidence that irregular forms are retrieved from memory but regular forms are rule generated.* Paper

presented at the Thirty-first Annual Meeting of the Psychonomic Society, New Orleans.

Rumelhart, D. E., & McClelland, J. L. (1986). On learning the past tenses of English verbs. In J. L. McClelland, D. E. Rumelhart, & the PDP Research Group, *Parallel distributed processing: Explorations in the microstructure of cognition. Vol. 2. Psychological and biological models.* Cambridge, MA: Bradford Books/MIT Press.

Ullman, M.T. (1999). Acceptability ratings of regular and irregular past-tense forms: Evidence for a dual-system model of language from word frequency and phonological neighborhood effects. *Language and Cognitive Processes, 14,* 47-67.

Rethinking America 3: An Advanced Cultural Reader by
Margaret E. Sokolik.Boston: Heinle & Heinle, 1999. 236 pp.

Today's World by Linda R. Fellag. Boston: Heinle & Heinle, 1996.
203 pp.

Reviewed by Karina Escajeda
University of California, Los Angeles

These two books, both exemplary offerings by Heinle & Heinle, are excel-
lent examples of current language learning textbooks that incorporate literature
that is *interesting* to read. Both texts are parts of larger series that identify specific
and general scope ESL concerns. Yet while *Rethinking America* and *Today's World*
can be used independently, each text could well support the other pedagogically,
since their respective strengths and weaknesses tend to compensate for one an-
other.

Margaret Sokolik's *Rethinking America* is a three-book series designed to
introduce American culture through authentic texts in ten topic areas that vary
from book to book. With texts at the intermediate, high intermediate, and advanced
reading levels, *Rethinking America* attempts to facilitate dialogue among students
who are interested in the ways in which contemporary American culture differs
from their own. Such dialogue between students ideally fosters introspection, con-
versation, and debate. While maintaining the cultural emphasis of the series, each
of the three books challenges its readers with progressively more difficult texts
and additional reading strategies.

Rethinking America is carefully organized into chapters that revolve around
a theme and further separate into sub-themes. For example, the "Money" chapter
contains four readings: two on the economy (spotlighting two very different capi-
talist ventures: Starbucks and Ben & Jerry's) and two on credit (pro and con
outlooks of our debt culture). Furthermore, each reading is presented to the learner
accompanied by a visual cue, culture-specific information, and often a small biog-
raphy of its author so that the reader may build an appropriate working schema
prior to navigating the passage.

Sokolik's text emphasizes several aspects of the reading process through
targeting activities. First, a reading strategy is introduced and a related exercise is
presented for the student to perform through length of the passage. While some of
the specifics of these strategies are not without their weaknesses (as I shall discuss
later), it should be noted that its inclusion, on the whole, is a terrific asset.

Students next focus on vocabulary. Here, unfamiliar terms are highlighted

and their additional use is prompted. "Think About It" sections encourage under-standing through simulations such as role-play and through involvement in related projects. At the end of the chapter, a synthesis section provides additional project ideas and can be used by students as a springboard for discussion and debate.

Writing as an adjunct to reading is presented as well at the chapter's end. This is a pleasant, if not wholly successful, merger of two academic skills that would require the addition of a writing component to the course in order to teach properly. Finally, each chapter concludes with a set of optional independent activi-ties that may prove helpful to the student who enjoys a particular theme and would like to explore it further outside of class.

Additional features adding to *Rethinking America's* attractiveness include an cultural almanac and Cable News Network (CNN) video accompaniments. By pairing each chapter of the text with a short video clip from the CNN archives on an accompanying videocassette, *Rethinking America* presents students with visual and oral previews of the material they will be studying in written form. Transcrip-tions of the video segments are also included in the instructor's manual, another bonus in addition to its answer keys, tips, and guidelines for EFL settings. Also included with the text is an almanac of cultural information detailing major US events. immigration statistics, the mottoes of the 50 states, etc. How relevant these "factoids" may or may not be to the students' daily lives doesn't seem to be a factor in their appeal: the point is that the information is *interesting*.

Even with these additional features, however, there are some limitations to the Sokolik text. For example. rate development in reading is an area that *Rethink-ing America* inadequately addresses. Rather, the many of the very strategies that should be presented for practice in rate development (scanning, for example) are presented only *after* the passage has been introduced. Moreover, such strategies are not well integrated with the text; they appear primarily as a catalog in the front of the book.

Another drawback to this series is its lack of emphasis on writing skills. Writing is introduced as an independent activity and is not fully explored as an-other way of understanding the reading. Despite these shortcomings, however, *Rethinking America* is a text which, with minor adjustments for additional con-cepts. could be successfully employed in either ESL or EFL learning environ-ments.

Linda Fellag's *Today's World*, like Sokolik's *Rethinking America*, is part of a larger series—in Fellag's case, Rebecca Oxford and Robin Scarella's *Tapestry* se-ries. The six volumes of this series are gradated readers running from "beginning" to "bridge" levels. *Today's World* is a "high advanced" reading text designed mainly for ESL learners attending post-secondary American institutions. Fellag's text dif-fers from Sokolik's in its approach to its subject matter. For where Sokolik's *Re-thinking America* explores the multiple manifestations of "American culture," Fellag's *Today's World* emphasizes a "multi-cultural" perspective of America. Each of the *Tapestry* books operates under the same principle of providing learners with

the tools to "empower themselves"—and part of empowerment, in *Tapestry's* view, is to focus on the multicultural, perhaps marginalized, experiences of new Americans.

Today's World is organized into eight chapters, each of which embodies a particular theme and contains three related readings. Each reading within a section is previewed, presented, and reviewed in turn, and reading strategies are highlighted during the presentations. Chapter four, for example, is entitled "Tribes" and contains a sub-section called "Goals." At the end of the chapter, a synthesis of the sub-themes is undertaken in order to relate them to the main idea of the unit. Expansion activities then invite the student to think outside the classroom and to make interactive projects for the group. (Each chapter also concludes with an evaluation section; however, these sections are very short and obviously are not designed to be key features of the instruction.)

One of the greatest strengths of *Today's World* is its emphasis on strategies and techniques to employ during the reading process. Each reading is paired with a strategy (e.g., "understanding idioms") that spotlights techniques to practice while reading. Additionally, the text facilitates reading rate increase by including short timed readings throughout the book. Such facilitation is entirely absent in the Sokolik text (a glaring singular defect), and Fellag nicely incorporates these readings and strategies into the overall framework of the book.

Another nice touch in *Today's World* is the "Threads" section that accompanies each passage in order to emphasize the multitude of viewpoints to any issue and to invite dialogue among students. In the "Tribes" chapter, for example, such "threads" include quotes from Bertrand Russell ("It's coexistence or no existence"), and from the 1994 World Almanac and Book of Facts ("Civil war intensified in 1994 in the central African state of Rwanda, where 90% of the population are Hutu tribes members and 9% are Tutsi tribes members").

Thus, while both *Today's World* and *Rethinking America* are textbooks that are constrained by their own limitations, both show signs of promise for particular types of applications. Sokolik's text is far more self-contained, due in large part to its inclusion of an almanac and accompanying videocassette as its components. Yet its conspicuous lack of "strategies work" necessitates the use of at least one other text in order to remedy this lack. Fellag's text would actually work very well in this respect. Moreover, because *Today's World* itself is hampered by a lack of accompanying materials, it really *should* be used only in conjunction with other supports (or as a support itself). Thus, Fellag nicely delineates the strategies that are lacking in the Sokolik text, with an end result that the texts complement each other well.

In conclusion, I would highly recommend both *Today's World* and *Rethinking America* for classroom use. Due to the very different natures of their content, however, care should be given to assess the interests of one's students prior to choosing one over the other as the *sole* classroom text. *Rethinking America* looks at America from various perspectives within mainstream society. It rarely presents

passages that explore the immigrant experience or marginalized position. This position, by contrast, is the primary focus of *Today's World*. Both would work well in either an ESL or EFL setting.

Based upon the general interest in understanding the mainstream culture that most ESL and EFL students have, however, if forced to choose, I would ultimately favor *Rethinking America*. The immigrant experience has been spotlighted for so long in textbooks of this kind that it is in danger of being seen by many students as a symbol of the disempowering of minorities. By focusing only on the views and experiences of themselves and other immigrants, non-native students are left at a disadvantage when faced with issues surrounding native Americans. Moreover, it is just this newly encountered American culture in which non-natives are most vitally interested.

Rethinking America presents a new perspective that allows the reader to think about aspects of American life *from the perspective of an American*. That is to say, Sokolik's text encourages the reader to align with the mainstream, not to segregate into the periphery.

RETRACTION

Abu-Akel, A. (1998). The study of cohesion in schizophrenia: Theory and application. *Issues in Applied Linguistics, 9*, 1, 37-60.

The editors of *Issues in Applied Linguistics* retract Abu-Akel (1998) in full. Portions of this article were previously published in another journal by Jonathan Fine (1995).[1] It is the policy of *Issues in Applied Linguistics* to publish only original work, and to respect the intellectual copyrights of all authors and scholars. At the time of publication the editors understood this article to represent original work by the author. We regret any injury that publication of this article may have caused.

[1] Fine, J. (1995) Towards understanding and studying cohesion in schizophrenic speech. *Applied Psycholinguistics, 16*, 25-41.

PUBLICATIONS RECEIVED

Journals:

Applied Linguistics, 20, 3, September, 1999
ELT Journal, 54, 1, January, 2000
Journal of Multilingual and Multicultural Development, 19, 2, 1999
International Review of Applied Linguistics in Language Teaching, 32, 2, May, 1999
The Modern Language Journal, 82, 2, Summer, 1998
The Modern Language Journal, 82. 3, Autumn, 1998
TESOL Canada Journal, 17, 1, Winter, 1999
TESOL Quarterly, 33, 3, Autumn, 1999

Books:

Aitchison, J. (1998). *The articulate mammal: An introduction to psycholinguistics.*
   London: Routledge.
Bethin, C. Y. (1999). *Slavic prosody: Language change and phonological theory.*
   Cambridge University Press.
Bod, R. (1998). *Beyond grammar: An experience-based theory of language.* Stanford,
   CA: CSLI Publications.
Borsley, R. & Przepiorkowski, A. (1999). *Slavic in head-driven phrase structure
   grammar.* Stanford, CA: CSLI Publications
Culpeper, J., Short, M. & Verdonk, P. (Eds.) (1998). *Exploring the language of drama.*
   New York: Routledge.
Dickens, J. & Watson, J. (1999). *Standard Arabic: An advanced course.* Cambridge:
   Cambridge University Press.
Downes, W. (1998). *Language and society.* Cambridge: Cambridge University Press.
Edwards, J. (Ed.) (1998). *Language in Canada.* Cambridge: Cambridge University Press.
Fehringer, C. (1999). *Reference grammar of Dutch.* Cambridge: Cambridge University
   Press.
Fox, B., Jurafsky, D. & Michaelis, L. (1999). *Cognition and Function in Language.*
   Stanford, CA: CSLI Publications
Hirst, D. & Di Cristo, A. (1998). *Intonation systems: A survey of twenty languages.*
   Cambridge: Cambridge University Press.
Kager, R., van der Hulst, H. & Zonneveld, W. (Eds.) (1999). *The prosody morphology
   interface.* Cambridge: Cambridge University Press.
Kahrs, E. (1998). *Indian semantic analysis.* Cambridge: Cambridge University Press.
Krahmer, E. (1998). *Presupposition and anaphora.* Stanford, CA: CSLI Publications.
Koenig, J. (1999). *Lexical Relations.* Stanford, CA: CSLI Publications
Lyons, C. (1999). *Definiteness.* Cambridge: Cambridge University Press.
Obler, L. & Gjerlow, K. (1998). *Language and the brain.* Cambridge: Cambridge
   University Press.
Scovel, T. (1998). *Psycholinguistics.* Oxford University Press.
Skehan, P. (1998). *A cognitive approach to language learning.* Oxford: Oxford Univer-
   sity Press.
Verma, M.K. (1998). *Sociolinguistics, language and society.* Thousand Oaks: Sage
   Publications.

INDEX TO VOLUME 8

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Editorials

Retraction

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188

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